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A. B.

of whose wisdom this book is but a faint reflection,



INTRODUCTION

We are all looking forward to a Glorious India of the future, and the rosy dawn of our freedom is already glowing on the horizon. Every son of India is busy preparing plans for industrial and economic development of India. I too have my own ideas on these subjects, but I am convinced that without a solid foundation of Theistic attitude or Scientific Religion as I call it, we shall be building on sand. I may be wrong; but I may add, many others think so too.

My object in publishing them is to try to suggest to those, who are against it, that Religion is not mere rubbish as they imagine. They may have personally risen above religion, but for an average man, it still serves a very useful purpose and it would be wiser to retain the gold that lies in it. To those who already agree that it is advisable, the

notes will perhaps show that it is feasible also. At any rate, even if a few of our younger generation read it, I shall feel myself amply rewarded.

I know it is very difficult to talk of the various religions without treading on someone's toes, but I can assure my readers, that I have honestly made an endeavour. If still I have erred, it is due to ignorance, and I shall feel grateful, if I am told about it.

Karachi

11th June, 1930.

I beg of my rationalist friends that they should be a little more "rational." They would also do well to reconsider the advisability of banishing emotion from the world—an utterly futile attempt, a Communal outlook is no more the result of Religion, than the poison-gases are the product of Science. The harm done by both is due in unregulated emotion, which people try to hide behind religion and science; and in my humble opinion, the first step towards improvement is to tear off that mask by showing that all Religions are essentially one and one cannot possibly be superior or inferior. My Religion is no doubt best for me, but I have no right whatsoever to thrust it on another.

We have materialistic science on one side and dogmatic religion on the other. We must steer clear of both rocks, which are equally dangerous,

and I am convinced more than ever, that the only remedy is Scientific Religion, or whatever other name you may choose to call it. That is the message I would like my Motherland to give the whole world by practising it, on the rosy dawn of Her freedom; and if that is also God's will, it shall be done.

Karachi

17th February, 1932.

First of all, I have to thank God for allowing me to finish this book. Without His hand, I could not have done it.

Since the last was written many years have passed. The dawn of freedom which was, "glowing on the horizon" has now dawned and the Land is free to follow its own course.

In this book the chapter on "Reconciliation between Religion and Science," a number of illustrations, and a third part of chapters dealing with the practical aspect. has been added, making the book, I believe, more useful. May this little book serve the purpose it is meant for, is my only prayer.

I am thankful to "The Aryabhushan Press" for doing this work so well, and in such a manner.

Shanti Kunj, 859 Shiwaji Nagar POONA 4. 6th December 1950

GANGADHAR NILKANTH
GOKHALE

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SCIENTIFIC RELIGION

I. Our Attitude to the Deeper Problems of Life

1. Our Search for Happiness—In this world in our search for happiness most of us are content to lead, what may be called "a butterfly existence"flitting from flower to flower. Some may be likened to bees, who care more for the honey than for appearance; but generally speaking, we are immersed in our senses, and the varied experiences they bring us. But we have all reached a stage in our evolution, when an inner conflict arises sooner or later. "I work so hard and yet no one seems to appreciate me: what shall I do? Shall I continue to work hard or slacken like others? A bribe is offered to me: shall I take it? Shall I refuse it even if there is absolutely no chance of being found out? Shall I go to races and get rich in one day as some do? Shall I take to speculation. when I see people making thousands every day?" Such questions do arise in the mind of everyone of us. We cannot help seeing that so many persons have not ultimately made themselves very happy by following any of these apparently easy and tempting paths: but perhaps we are made of better stuff than those who have gone under. If the chances of

success are great, why not try? Is the safety of our skin the only consideration, or are there any moral considerations at all, which affect our ultimate happiness? It is a rare man in whom the little querulous voice is not heard now and then, and again and again. "To be or not to be, to do or not to do" are questions that confront us often enough.

- 2. And sometimes when we seem to have obtained our heart's desires—health, wealth, company and position, some near and dear one is suddenly snatched away from us by the stealthy hand of Death, and we are plunged into grief. Or in rare cases when we have everything that generally gladdens our senses, "we feel miserable because we are not miserable". Thus sooner or later a great many people turn aside from mere sensuous ex. perience, and begin to ask in the words of Shree Shankaracharya, "Who am I? Who are you? Whence did I come? Whither am I going?"-Ouestions for which our senses have no answer. As they put it, "we turn our mouth inwards;" and this experience is neither very rare, nor confined to the elect. Only it is a fleeting feeling and it is difficult to retain it.
- 3. Divine Discontent—There is only one case recorded in History that of Prince Siddhartha. He was brought up by his father the King in the pleasantest surroundings, that could be obtained,

and he had no personal problem of his own; and vet his identification with the creation was so great that, only four visits to the sorrowful world, which made every effort to look gay under the strictest orders of his father the King, convinced Siddhartha that all was not well with the world. The first time, he saw an old man and wondered if he too would grow old one day. Then he saw a sick man and asked everyone if he too would become sick. Then he saw a dead man, and when he was told that he too would die one day, he lost all taste for worldly existence. He could not see any use in being a King if he could not find any remedy for these ills of life, and when he had a vision of a Sannyasi who had renounced the world, he left his palace and went out seeking a solution for these problems like the Sannyasi. Only four sights—the like of which we see day after day—were sufficient to kindle the fire in his heart; but such cases are very exceptional.

4. We too have a momentary pang, but the mood does not last long. The spark from within falls often enough, but it can not give us any warmth. It cannot produce any results until we use it to kindle the fire within our hearts. All real knowledge comes from within, but if we are familiar with the subject before-hand it makes it easier for us to get it into our waking consciousness. We are asked to approach the Teacher with Samidhas (fuel)

in our hand, and all reading serves the purpose of this fuel, which once kindled, helps us to keep up the flame.

5. Science and Religion—Science deals with "Phenomena"—which a dictionary tells us, are "things noted by the senses"; but as our questions arise because we are not content with these, we have necessarily to turn to Religion, which deals not with things as they seem to be, but with things as they really are. It is thus the province of Religion to answer these questions. Religion is not merely a set of "Thou shalt nots," nor is it only the ceremonials and observances, which all of them prescribe to some extent; nor is it the belief in certain stories and mythologies. True Religion is all these and much more. Whatever the accretions, and distortions, they are but the froth and foam in the disturbed waters of life; but all religions are founded on a bed-rock of Truth, which none of these can shake. It is in these foundations that a solution of our life's deeper problems is to be sought. It is in this sense that the word "Religion" is used throughout this book, and as such it is a subject of the highest importance to mankind, being in fact the only thing the pursuit of which distinguishes Man from other animals. Whether it is only fit to be "relegated to the scrap-heap," even in the twentieth century is at least a matter for serious consideration.

- 6. The bed-rock of Truth on which the creation is built has been sketched for us by our Seers and Prophets, but they have told us that the "Real Truth" is best described as Something, "no words can describe." It must be experienced by each individual for himself and the prospect and promise of that experience has been held out before all mankind. But while we are on our way to that goal, the Seers have given us, in our religions, a search-light to lighten the path in front of us, and it were folly to shut our eyes and insist on groping our way in the dark. But here arises a difficulty.
- 7. The light our Seers shed in front of us in the form of Religion is only to enable us to see things as they actually are. But the vision they give us does not often correspond with what the objects in front of us appear to us in the dark; and a doubt arises in our mind as to which of the visions is the truth. A great many people respect Religion to such an extent, that the idea of asking questions does not enter their heads, and they are quite willing and content, to accept every description as correct. A great many more are afraid of the priests who gather round every religion; and so are constrained to believe in their authority. But a few remain, who dare trust their own vision. If, as the Prophets themselves have told us, "God made man in His own image"; this would appear to be inevitable and just as it should be. Without this perfect

liberty of conscience it would be impossible for man to attain to his full stature.

8. Liberty of Conscience—If we glance at the literature in Ancient India—the glorious India of the past—we find this liberty of conscience a very notable feature of the Society of the days, when India was at the height of her civilization. We have numerous instances of people who "dared" question the established order of things. Charvakas who were satisfied with a materialistic solution of life, were not despised or burnt at the stake, for saving so. A Kanada who did not consider a personal Deity at all necessary and died remembering "atoms" was an honoured savant whose theories people studied side by side with others, and still do so, with respect. King Jaivali dared question the learned Uddalaka Aruni's son, and the difference ended by the great Uddalaka himself accepting the mere kshatriya as his Guru. The highest Scriptures only went by the name of Shrutees-things heard. The Law books Smritees—things remembered. Mythologies were aptly described as Purānās--old things, and were distinguished from more recent happenings, styled Itihāsās—so it happened. The Bible of the Hindus was and is the Gita—what was sung. verily the Song celestial; and the highest philosophies—the Upanishads are but things to be learnt by sitting near the Guru-as distinguished presumably from things fit for mass-lectures. These very names of

the holiest of the scriptures breathe freedom of thought, and it is this liberty of conscience which has, in fact, led to the enormous complexity of thought in Hinduism, which bewilders those who are not willing to go deeper.

lust as the skin of a tortoise hardens into a shell as it gets older, Hinduism also grew a shell in time. It is rather curious that the younger tortoises in Europe also grew shells far more quickly. so that it is difficult to say whether Europe or India had a thicker shell during the dark ages. The shell was first cracked by martyrs like Giordano Bruno. Bacon widened the breach, and Science restored to Europe the liberty of thought. The advent of science has started the same process in India. A consciousness has again arisen all over the world. that every man ought to be free to decide things for himself, but this is by no means an accomplished fact. A very large majority of mankind, even in the twentieth century, are still slaves of custom and fashion; and the path of people like Gandhijee who dare experiment with Truth is certainly not very smooth. Although physical slavery is now a thing of the past, mental slavery still abounds in the world, and while this lasts, any real insight into the deeper problems of life is impossible. Before we can expect any solution at all, we have to learn to approach the problem as seekers of Truth in a perfectly scientific spirit.

10. Scientific Superstition—When I use the word "Scientific" spirit, I mean as it ought to be, and not what we often see exemplified in the conduct of some priests and votaries of Science. The perception of Truth is coloured by "the personal equation" of the observer, and so all scientific methods very rightly try to eliminate this. A scientist does not depend upon the experience of men—one or many: but takes results as indicated by the most delicate machines he can devise. They enable him to measure lengths, areas and weights, but being material in nature, they can only measure other material things. But life's deeper problems are not material, and here, all the instruments of precision fail him. None of the wonderful creations of his laboratory will show him the difference between a living rat and a dead rat, not to speak of giving any information about the working of the rat's consciousness. Instead of admitting the limitation, and proceeding to devise other and less material means. of getting at the truth, the scientists of mid-Victorian era tried to assert that things which did not affect their instruments, could not possibly exist. To them only such phenomena as could be measured were "facts," all others were "opinions," and necessarily "untrue," or at best "unknowable," and dabbling in that region was mere "Superstition." The wisest of them had no right to put a limit to man's search for Truth, in any direction whatsoever. and the Western scientists took half-a-century to

realise that in calling other people superstitious in this manner, they were only adding a new "Scientific superstition" to the existing stock of the world. That "unscientific" position has now considerably weakened in Europe; but unfortunately still persists in India, and it is important to emphasise the necessity of keeping away that form of mental slavery.

- 11. Man authority for himself, not others-A seeker after Truth must be willing to understand all phenomena, as perceived by himself, or as described by others, before he comes to any conclusions at all. And even after he has formed a theory of his own, he must not shut his eyes to any new experiences, that may be placed before him, and must be at all times ready to take these into account and judge for himself, without accepting the authority of any other man or machine. Whatever corresponds to his personal experience will alone be his idea of Truth for the time being, and he must determine to stick to that vision. Only such a man will go from vision to vision, until one day he perceives the whole Truth itself, when in the words of the Shrutees, "All the knots in the Heart will be cut, and all his doubts will vanish."
- . 12. That end is far off for most of us; but while we are on our way, it is well to bear in mind always that afterall, what each person experiences

is only a facet of the Truth, and not the whole Truth. Each man's facet is certainly truth for himself, but he has no right to impose it on others, whose experiences may be different. If any person feels that his own view of life has enabled him to attain "Happiness," which "all the world is aseeking," and wishes to tell others of the way, he can do so, only in a respectful manner. All those who differ from him are not necessarily giving an "exhibition of their imbecility." Every man must be always ready to credit his audience with at least the same amount of intelligence, that he claims for himself, and willing to let each person have the same liberty of conscience, that he demands. It was in this spirit that our ancients studied the deepest problems of life; and even in the fourteenth century. we had Madhva Acharya, the head of the Shringeri successively passing in review sixteen philosophical systems in his Sarva Darshana Sangraha. Vachaspati Misra is another remarkable instance of equanimity, and it is this quality, we wish to restore in our Land. The following chapters are an attempt in that direction; and if I have not been able to keep up to that hope. I do wish others will succeed better.

II. Materialism and its Logical Consequences

13. Matter the most-obvious reality—Our knowledge of the world is in the first instance derived through our five senses of smell, taste, sight, touch and hearing, and as these are affected only by things having а material existence. matter becomes to us our glimpse of Reality. We notice that surrounds us on all sides; and all the phenomena we see are but its movements and modifications. Although we can change its we cannot destroy matter, nor can we create We can offer no explanation as to how this matter came into existence, nor can we say what will happen to it in future. To us matter has existed in the past, exists now, and will continue to exist till eternity. Even living beings appear to us to be mere moulds, into which matter flows in and from which matter goes out every second, and so we infer as did Bhrigu the son of Varuna of yore, that food is Brahman. "All beings are born out of food. Food enables them to live: and into food, (for others) will they resolve themselves, when they die. Verily Food is the great Reality."

Animals thrive if they find congenial surroundings, and the world evolves by a process of Natural selection, in which the fittest survive. "Fishes live in the sea, as men do on land: the great ones eat up the little ones." As another Poet put it:—

"Nature red in tooth and claw,
So careful of the type she seems,
So careless of the single life 'but no,
From escarped cliff and quarried stone,
She cries a thousand types are gone."

That is how the world appears to the Materialist—one who is interested in material ralues only.

14. That is the most obvious deduction. The froth and foam on the surface is bound to catch our eye first, and if we are not willing to dive deeper, it is perfectly pardonable to conclude that nothing exists but matter. Matter being known to be made of tiny particles, the whole Universe to us is but a "fortuitous concourse of atoms". Certain atoms form congregations, while others do not, because that is their property. All molecules behave in some set ways, because it is natural that they should do so; and as the ancient Sanskrit saying goes:—

"The fire is hot, the water cold Refreshing cool the breeze of the morn Whence came this variety? From their own nature was it born." Living organisms are but aggregations of matter, and even thought is exuded by the brain, as the liver secretes bile. All these aggregations dissolve at death, perchance to form other aggregations; but of the original living being nothing is left behind. As Charvakas put it:-

"When once this frame of ours they burn How shall it ever again return?"

15. Scientific Materialism after Darwin--It may be recalled that this doctrine of what may be called "Scientific Materialism" came to the fore-front soon after Darwin published his monumental work on "The Origin of Species", in which he proved from a mass of evidence that the innumerable species of animals could have evolved from a common stock, by a process of chance variation and natural selection. That the lower animals might have evolved in that manner people were willing to accept: but when it was suggested that Man, who according to the Bible, was "created by God in his own image", was also a mere variation of an ape, it sounded as a direct insult to Religion; and so the Clergy entered the lists. Although Darwin himself never entered into the controversy, he found doughty champions in Haeckel and Huxley, who even called himself "Darwin's Bulldog". The meeting of the British Association at Oxford in 1860, found the rival armies drawn up in formidable array and

a battle royal ensued. Forgetting that Darwin's evidence related solely to anatomical differences, it all degenerated into an "Ape versus Man" controversy. Although Darwin has once recorded his conviction that the Universe is not the result of chance, curiously enough the "Scientific Materialists" of those days took their stand on Darwin's conclusions, that Random variation and Natural selection would be sufficient to account for the countless variety of animal life and the innumerable species arising from one common stock. It was argued that "Darwin had at last explained everything," and that it was no longer necessary to believe in any "design in nature, or in a Designer or His angels". God was no longer needed even as a Hypothesis. As one put it, "Matter had all the potentiality once attributed to Life and Mind did not matter."

16. Nietzsche's Superman-Later Nietzschea German philosopher, who was very much taken
with the theory of Darwin, recognised the powers
of the mind and saw no reason why they too should
not be used in the struggle for existence. He argued
that the next stage in evolution would be the firth
of a Superman, who would be the incarnation of
Power bodily and mental, pitiless, insatiable and allconquering. Nietzsche preached that the whole
Christian system—pity and sympathy and all that
—was the morality of slaves. He based his theories

on a notion of Darwinism, which Darwin would perhaps have been the first to repudiate, that the struggle for existence depended wholly upon individualistic competition. Nietzsche's Superman was a ruthless individual who had determined to use all his powers of body and mind, to raise himself above his fellowmen, by proving that he was the fittest to survive.

17. Logical Consequences of these Ideas.— If matter is the ultimate Truth, and nothing exists that does not report itself to one of the five senses. then Nietzsche was perfectly right. Why should any one deny himself any pleasure out of pity for some one else? Our suffering neighbour suffers, because he is not fit to survive, and why should we waste our sympathy on him? If money is the only means with which we can buy material things which please our senses, why should not everyone try to get rich quickly; and why should any one do anything which does not bring in money! sharebazar and the race-course combine the least quantity of work with the quickest way of getting rich, and are but a further step. Charvakas' advice to borrow and drink ghee was perfectly sound, only we might now substitute champagne for ghee. Any restrictions on the facilities for drinking would be an infringement of personal liberty. Temperance is desirable because that alone will enable one to imbibe the maximum quantity of wine in one's life-time:

but prohibition would be a crime. If man derives great pleasure from the company of women, why should he not have as many as he can buy? Do we not see these views reflected in our daily conduct and there is nothing unusual about them, because are they not the logical corollaries of the doctrine of materialism, that Nietzsche preached and which we all, to a certain extent, follow?

- 18. Not a modern discovery—This doctrine is not a new discovery of the nineteenth century as some imagine. Practically all that our present day materialists can say has already been propounded in India as far back as we care to investigate, as will be seen from the following extract from the Sarva-Darshana-Sangraha.
 - "There is no heaven, no final liberation, nor any soul in another world:
 - N or do the actions of the four castes, orders, etc., produce any real effect.
 - The Agnihotra, the three Vedas, the ascetic's three staves, and smearing one's self with ashes,
 - Were made by Nature as the livelihood of those destitute of knowledge and manliness.
 - If a beast slain in the Jyotishtoma rite will itself go to heaven,
 - Why then does not the sacrificer forthwith offer his own father?

- Then here too, in the case of travellers when they start, it is needless to give provisions for the journey.
- If Beings in heaven are gratified by our offering the Sråddha here,
- Then why not give the food down below to those who are standing on the house-top?
- While life remains let a man live happily; let him feed on ghee even though he runs into debt;
- When once the body becomes ashes, how can it ever return again?"

This doctrine is founded on appearances as they strike every eye, and so has existed and will continue to exist. That is why in Sanskrit, it is called the Lokâyata doctrine—one which is prevalent in the world. It is no use disguising the fact that a very large number of men in the world, judged by their behaviour, are materialists at heart. And yet there is something deeper down, which refuses to accept that creed.

19. Not widely acceptable.—If I get completely dissolved at my death, there is no reason why I should subordinate my pleasures to that of Society taken as a whole; but for all that, we do acknowledge Society even if our homage is in the nature of a Social contract. We admit that our "enlightened self-interest lies in the greatest good of the greatest number," and for achieving that end, pity and sympathy are also useful. All our present code of morals is based upon this assumption, perfectly inconsistent with materialism. Our ancient

Chârvâkas were more logical. For a genuine materialist the Criminal Procedure Code is a curtailment of his freedom, and a practical limit, because he is unable to fight the State. He would ask, "If a few rupees are moral at bridge, why not a few hundreds at poker? Why should not lotteries be allowed, especially in a worthy cause? If some women find it easier to live by selling their body. why should they not do so? Why should not a strong man take whatever he can, from one weaker than himself, for is that not the Law which all animals follow? If men are to make a contract with Society, because by thus combining together they can get more material pleasures, why should not a few strong men combine to rob the rest? Why should not one strong nation enslave the whole world, if it can do so?" If matter were the only Reality, that would be perfectly sound; and vet when Bernhardi boldly preached that goal for Germany, before the First World War, the whole world was aghast. We are all of us on Bernhardi's road: but there is within all of us an Inner Voice--certainly not material-which cries halt at every step, and we are trying our best to smother it. Something seems to exist beneath all the froth and toam on the surface, and if we are powerless to annihilate it, why not dive down a bit and try to understand its nature, and perchance we may find that the deeper Truths are not as superfluous as we imagine.

III. Facts which call for Explanation

20. Matter and Mind-Myer's researches. Matter is the most obvious Truth, and modern Science has tried to explain all known phenomena, by formulating laws, governing modifications of matter. Its votaries have found a solution for a great many problems, but even the greatest of them Sir Isaac Newton felt that he was picking pebbles on the shores of the Sea of knowledge; and a true scientist would be the last person to claim that he has understood all, even in the realm of matter. But in this world we meet with so many facts. which certainly are not material in nature, and need some explanation, which a materialistic basis of life fails to give, and it is worth-while going into these in greater detail. In the West all such riddles are grouped under the working of the Psyche-Mind, and perhaps no one has done more to study this aspect of life, than F. W. H. Myers. He was one of the pioneers and founders of the Society for Psychical research, and it was he who by his honest. patient, devoted and scientific research, obtained for that subject its proper place in the estimation of the thoughtful. In his work "The Human Personality"1

i. "Human Personality and its Survival of bodily death" by F. W. H. Myers in two volumes. (Longmans Green, 1903). Also a shorter version by his son 1906. References are to the bigger book. (H. P.)

along with the dozen volumes of evidence, on which the book is based, he has left for us a mass of very valuable information, and if we wish to find out, what lies under the froth and foam on the waters of life, we should do well to take a few dips into this book.

- 21. Change of Personality.—Exactly the same human being will at times show quite distinct characteristics, which certainly are not due to any material change in his body; and Myers first recapitulates a few such instances.
- 22. The first is Hysteria, in which a persisent and uncontrollable idea, which has no foundation in fact, seems to get hold of the mind of the person for the time being. Myers records the case of a woman, who could not get rid of a smell of burnt pudding, for days. We all know how a weak sick-man, who can get up with great difficulty, will need four men to hold him down, when he becomes hysterical; and this temporary but very large increase in muscular power is not due to any physical development. Whence does it come?
- 23. Then there is the sudden loss of memory. Mr. Drewry of Petersburg, Virginia, U. S. A., mentions one such case in the Medico-legal journal for June 1896.² "Mr. K. was a merchant, fifty years

^{1.} H. P. paragraph 217.

^{2.} H. P. paragraph 228A. , ,

old, of splendid physique, sober, moral, and industrious, of affable disposition, happy and contended in his domestic relations. One day, while apparently in perfect health he went to another city to purchase goods for his store. He stayed there two days, and transacted a great deal of business and met many old friends. He got into a steamer-cabin on his return journey, but when tickets were collected he was missing. No one had seen him leave the boat, jump or fall over-board. A vigorous search was made, but it led to no results. Six months later, he appeared suddenly and unexpectedly. He was reduced from 250 to 150 lbs. and was very feeble, and in a partially dazed condition. He wore the same suit of clothes, and the key of the cabin was found in his pocket. When he recovered after some time he remembered getting into the cabin: but then it was all a blank till he came suddenly to himself one day after six-months, driving a fruit-wagon in the street. Why he was there, when he got there, whence did he come, what had he been doing were all puzzles to him. On inquiry he learnt that he had been there for some time, and managed to get home. That was all. The six months were completely blotted out of his memory." If memory is stored in the grey matter of the brain what happened to it?

24. Talking in an unknown tongue is another case of change of personality. Sometimes people are

known to develop two and three distinct personalities. The following is a case recorded in the Journal of the American Medical Association, 1895.1 "Alma Z, an unusually healthy and intelligent girl, broke down in health after a period of strain. After two years' great suffering she developed suddenly a second personality. In a peculiar child-like and Indian-like dialect she announced herself as "Towey" who had come to help No. 1. Towey was vivacious. cheerful, full of quaint and witty talk, and could take abundant refreshment, which she said she must take for No. 1. Towey came and remained for days at a time, and wrote letters for No. 1. No. 1 remembered nothing of that period when Towey was in charge, and at such times there was a marked improvement in the physical condition. They were two distinct personalities residing in one body."

I have myself heard one orthodox Hindu Brahmana at Dhulia in 1906, who did not know a word of Arabic, fluently repeating the verses in Arabic, when possessed by a Muslim Pir.

25. Then there are cases of sudden conversion recorded by James, in which people have as it were, in a moment changed their entire out-look on life, and this change has been permanent. We know that the physical body cannot change so suddenly; and the change must relate to the mind, which

^{1.} H. P. paragraph 235.

thus appears not to be so entirely dependent on the physical body.

- **26. Genius.**—There are instances on record of persons who at times exhibit extraordinary powers.
- 27. A remarkable instance is that of the arithmetical prodigies generally boys, capable of performing "in their head" and almost instantaneously, problems for which ordinary workers would require pencil and paper and much longer time. Myers gives thirteen such cases amongst whom were Gauss and Ampere, the celebrated mathematicians.

Mr. Blyth of Edinburgh, a civil engineer, when six years old once asked his father when he was born. Being told the hour and the date, the child remarked "Then, father I have lived so many seconds." The number of seconds was calculated and at first found to be wrong by 172,800. The boy pointed out that the father had omitted two leap year days.

Bidder, another Civil engineer, describes in the Proceedings of the Institute C. E. Vol. C III. (p. 252) how he could mentally determine the logarithm of any number to 7 or 8 places, and intuitively say which factors divide any large number.

^{1.} H. P. paragraph 309.

Dase (a friend of Gauss) was singularly devoid of mathematical grasp and yet made tables of factors and prime numbers for the seventh and eighth million, without being able to cross the ass's bridge—Euclid's fifth proposition.

28. A study of these cases shows that the faculty is mostly transitory, appears in childhood and vanishes later. The prodigy is unable to keep it up even if he tries to do so. Strafford rose to eminence as Professor of Astronomy owing to his boyish gift of calculation, and had every motive for retaining it. At ten, he could work out a multiplication answer of 36 figures in one minute, and yet lost this power later. Bishop Whatley could do the most difficult sums between six and nine, but was "a perfect dunce in ciphering" in later life, according to his own statement.

Another peculiarity of these prodigies is that they are unable to explain their own methods. The mental black-board on which the steps of the calculations are recorded does not seems to be visible to the prodigy.

Then there are other and more permanent types of geniuses. Herschel could see geometrical spectres during waking hours, and could not account for them. Instead of obstinately endeavouring to solve a proposition at once, Arago would admit its truth provisionally, and next day would feel surprised at understanding thoroughly what seemed all dark before. We have in India the case of Ramanujan, who while working as a clerk in an office, suddenly discovered his mathematical talents in one day. Ribot, in summing a number of such cases, came to the conclusion that "It was the unconscious—not ordinarily existent in the brain—which produces what is vulgarly called inspiration".

If not secreted by the brain, whence does all this genius come?

- 29. Sleep and dreams¹.—It is fully admitted although an absolutely unexplained fact, that the regenerative quality of healthy sleep is something sui generis, which no completeness of waking quiescence can rival or approach. A few moments of sleep—a mere blur across the field of consciousness—will sometimes bring a renovation, which hours of lying down in darkness and silence will not yield. The break in consciousness is associated in some way with a potent physiological change. Whence comes this?
- 30. Dream memory may include facts once known and now forgotten, or facts which waking attention has never observed. Myers gives an instance of Mr. Lewis, who had lost a very important landing order, through a crack in a desk, and

^{1.} H. P. paragraph 403.

found its place in a dream. Agassiz discovered in a dream the skeletal arrangement for scattered bones. which had baffled his waking skill. Prof. Lamberton of Pennsylvania University was looking for an analytical solution of a problem without ever drawing a single figure 1: He got bogged and cried halt. A week later he saw in a dream a geometrical solution of the problem, clearly projected on the opposite wall. Mr. Boyle, an officer at Simla who had no occasion for anxiety regarding his father-in-law. dreamt that he saw him dying at Brighton. The dream was correct, down to the hour when death took place. Myers gives numerous instances of like nature, and perhaps all of us have some sort of personal experiences of our own. But the most remarkable case quoted is that of Robert Louis Stevenson, the celebrated author, who used to elaborate his stories out of dreams, in which he could see wonderful plots worked out by "some little actors", in an almost semi-awake condition. Whence came these experiences previously unknown in the waking state?

31. Hypnotism.—The phenomenon of Hypnotism is another puzzle, which is inexplicable to a materialist, and when first discovered was denounced as "fraudulent fiction". Science no doubt has suffered a great deal from religion, and perhaps it was natural (but not Scientific) that it should adopt the same

suspicious attitude towards further advances in knowledge. That is however a thing of the past, and hypnotism is now generally accepted.

- 32. It was Mesmer, a French physician, who first discovered that a nervous influence could pass from one man to another, and cure diseases like headache, etc. By treating patients in this manner Mesmer soon made a great impression on Savants as well as on the fashionable world of Paris. Later Esdaile 1 in his hospital at Calcutta produced by passes deep anæsthesia, under which he performed hundreds of serious operations. His success in this direction was unique, and had it not been a matter of efficial record, no one would have believed it to be true. Later Braid showed that hypnosis could be induced without passes by suggestion. The most important novelty was the possibility of self-suggestion and self-hypnotism by concentration of will.
- 33. Hypnotism can be best described as the experimental development of the sleeping phase of the personality, something like diving into the inner recesses of the personality, when the outer layers are quiescent. Each sub-division seems to have its own set of memories, and Mrs. Sidgwick² discovered nine such sets in a patient, with increasing passes, repeated in the reverse order with passes in the other direction. It is also possible to produce a

^{1.} H. P. paragraph 507.

^{2.} H. P. paragraph 523 B.

permanent effect on the organism and hence its curative value.

- 34. Dr. Berillon who was the first to apply the hypnotic method to the education of children, records amongst others the case of a boy, who had formed a habit of sucking his fingers during sleep, and could not go to sleep until they were in his mouth. He was cured in three sittings. Shyness, habit of lying, excessive fear or anger, have all been known to cease, and even drug habits—tobacco and morphine—have been thrown off in a day after hypnotic suggestion. This method is particularly useful in all nervous diseases, and phobies—unaccountable and often most unreasonable fears.
- 35. Hypnotic state leads to increased vision, and there is an instance of a hypnotised subject reading figures reflected in the cornea, or seeing colours with hands, eyes being blind-folded,². Blisters were produced by suggestion and cured after a stated interval.³ Post-hypnotic suggestion can be postponed at will. A hypnotiser told the subject that he would poke the fire, when the hypnotiser had coughed three times. The awakened subject knowing nothing of the order in the waking state, would still be on the look-out for the coughs and

^{1.} H. P. paragraph 527, A, 2. H. P. paragraph 549 B.

^{3.} H, P. paragraph 543 E

poke the fire at the preordained signal. Dr. Bram-well made a number of experiments on these lines by suggesting to a patient Miss A., during hypnosis, that at the expiration of a varying number of minutes she should feel impelled to make a cross on a piece of paper with pencil, and most of these came out quite correct. These are a few instances which show how wonderful are the powers of the "mind," as distinguished from matter; and it seems hardly logical to assume that physical matter is all that we have in this world.

36. Hallucinations.—These are generally supposed to be due to a morbid condition of the brain in which objects which have no existence are believed to be seen. This was proved to be without foundation by Gurney's statistics of hallucination occurring to person in "good health free from anxiety, and completely awake." Later the Society for Psychical Research carried out another elaborate "Census of Hallucinations" in 1889-92.2 17,000 persons were asked "Have you ever, when believing yourself to be completely awake, had a vivid impression of seeing or being touched by a living being or an inanimate object, or of hearing a voice, which impression, so far as you could discover was not due to any external physical cause?" 1,684 said "Yes." To obviate the possibility of mistakes,

^{1.} H, P, paragraph 551 C, 2. H, P, paragraph 612 A,

each collector was to ask not more than 25 persons. The names of persons whose answers were previously known were especially marked. To eliminate the effect of forgetfulness, the results were tabulated according to the time elapsed. The number decreased rapidly as time passed, and at ten years, was less than half.

- **37**. One very important hallucination is the Death coincidence, that is to say, cases in which a recognised apparition occurred within twelve hours of the death of the person represented by it, the death being unknown to the percipient at the time. After making all possible allowances, the number of affirmative answers was boiled down to 30 out of 1300, a proportion of 1 in 43. The average deathrate in England being 19.15 per 1000 (1890), the mathematical probability that any one person taken at random will die on a certain day would be 19.15 in 265,000, or 1 in 19,000. So the actual coincidence was 440 times greater. It could not be all imagination, and yet had no foundation in physical fact. How can we explain this, if all phenomena are but movements and modifications of matter?
- 38. Crystal-gazing.—Crystal gazing as a means of obtaining supernormal knowledge has been practised in various forms all over the world, for at least 3000 years past, even amongst savage trites. Instead of crystal, a vessel containing water, mirrors

or polished steel, liquids on the palm of the hand, even a drop of blood or the human finger nail have all been used. The idea is that if certain persons, preferably young children steadily gaze at the bright object, visions of past or future occurrences begin to appear before them and this has been verified under scientific conditions, in recent times.

39. Miss A. Goodrich Freer gives an account of these in her paper on the subject¹. Once she was occupied with accounts and opened a drawer to take out her bank-book. Instead, her hand came in contact with a crystal, and she started gazing at it, when she saw nothing better than the number 7694. She could not understand what it was, until on taking out the bank-book later, she saw the number on that book. She had not seen the book for some months past, and certainly did not remember the number in her waking consciousness. Once she saw in her crystal a vision of some extraordinarily tall and bushy sweet peas trained on a fence, and on visiting a neighbour's garden which she had never entered before, saw exactly the same hedge in front of her. Another lady² once saw Lord L. at prayer with his family, waving aside Lady L. with his hand. This incident could not possibly be known outside and yet the vision proved correct.

^{1.} H P. paragraph 625 B.

^{2.} H. P. paragraph 625 C.

In another case the seer described to Sir Joseph Barnby a lady with a particular dress. He identified her as his wife, but knew that she did not possess a gown of that description; and so he disbelieved the story. On returning home he was astonished to find Lady Barnby wearing exactly the dress described which she had in the meantime purchased. The sequel came eighteen months later, when the seer recognised Lady Barnby in a crowd, in exactly the same gown, without any introduction, as the lady of her vision.

- 40. Another instance is taken from Andrew Lang's Making of Religion (1898). Miss Angus was once asked by a stranger to search out a friend of whom she would think. She at once remarked "Here is an old, old lady looking at me with a triumphant smile on her face. Her face is very wrinkled, but—she can't be very old. Her hair is brown, although her face looks so old." She described the dress and the questioner had no difficulty in recognising the old lady as her friend's mother, who was so fond of dyeing her hair at the age of 82, that it was a family joke, of which the crystal gazer could have known nothing. If the scenes described correctly were never seen by the seer before, whence did the brain-record come?
- 41. Telepathy.—Telepathy or transmission of thought to a distance must be a fact, if any dis-

embodied intelligences exist at all. If, as is a very ancient belief, we can communicate telepathically with higher minds, as in prayer, it does not seem unreasonable to infer that similar exchange of thought may be possible between minds at the same level. This is a very old notion, but only recently has it been tested by actual experiment. The best evidence in such cases is perhaps where the ideas to be transmitted are trivial and devoid of all association or emotion.

This phenomenon has been studied very carefully by various people again and again, and is one in which everyone can get some sort of proof for himself. Letters between friends crossing each other after months of silence, is a very common experience. "Talk of the devil and he is there,"—as we often put it. At any rate there is enough proof to justify each one making experiments by himself, and in doing so it is well to remember that thought-transference is easiest between two persons who really love each other.

42. Gurney records a set of such experiments conducted by Mr. Guthrie, J. P. of Liverpool, himself a sceptic at first ¹. The ideas transferred were of colours, geometrical figures, cards, and various other objects. About 150 trials were made in one month, and reproduced diagrams were carefully mounted and preserved by Mr. Guthrie. Some of these are printed in Myers' book; and no one can

^{1.} H. P. parageaph 630 B, and paragraph 668 A.

look through them without perceiving that chance or guess-work is out of the question. Soon afterwards Dr. (now Sir) Oliver Lodge joined Mr. Guthrie and carried out another independent series of trials, and convinced himself of the genuineness of the phenomenon. One very curious experiment was when the percipient was proved to be influenced by two minds, simultaneously concentrating on two different diagrams.

43. Then we come to cases in which not only the idea but the whole man is transferred without his being aware of it. Two ladies sleeping in a hotel at Cario one night in a perfectly awake condition saw another English friend in the room, who was in England at that time 1. On inquiry later they learnt that he was greatly worried that day, and was sitting by his own fireside, wishing very intently to meet one of the ladies so that he may take her advice Another instance is that of a doctor who felt a sensation of visiting one of his patients and was also seen by the patient's wife 2. Then comes the case of Rev. Godfrey who was so struck by similar accounts of telepathy that he made up his mind to try an experiment. Retiring at night, he set to work with all the volition at his command to visit a lady friend some distance off. He sustained his attention for a few minutes and then fell asleep. He got up early In the morning with a feeling that he had met the

^{1.} H. P. paragraph 665.

^{2.} H. P. paragraph 666 A.

friend. He had not dropped the slightest hint to her, about the intended experiment, and on inquiry next day he was surprised to hear that, going downstairs the same night she had distinctly seen him standing on the stair-case, and when she held up her candle to him, he disappeared suddenly. He tried the experiment a second time, and succeeded, thus proving that not only a thought but the whole personality could be projected to a distance, dissociated from the physical body.

44. Conclusion-Personality can be dissociated from body. All these various phenomena have been so carefully investigated and recorded by Myers and others that their truth cannot be questioned. The scrupulous care taken can be seen from the precautions laid down in the "Census of Hallucinations," and these inquiring minds had no hesitation in declaring that there is an undoubted residuum of such facts which need an explanation. Truth cannot be suppressed and Science which ridicules facts is no Science. And if these facts cannot be explained on the theory that the whole world is a fortuitous concourse of atoms, we have to look for another hypothesis more consistent with facts. In the words of Myers, "Our experiments have shown us that the Personality can be dissociated from the body, and can act independently of it." To what degree of intelligence, independence and permanence may it conceivably attain? We shall try to investigate.

IV. Do the Dead Die?

- 45. Researches by Myers, Conan-Doyle and Lodge—If the man within, can exist and function independently of the body, it is quite natural to inquire whether the death of the body, means the annihilation of the personality. Even this enquiry has been re-pursued in a perfectly scientific spirit in modern times by Myers, and later by Conan-Doyle and Lodge; and it is well to glance through their researches.
- 46. Apparitions of the Dead—haunting—Apparitions of dead person, at a long distance, soon after death, have been already noticed by Gurney and Myers in their investigations of Hallucinations. If the dead exist, communication with them seems easier for a person who is himself approaching death, when the gateway between the two states seems to be more ajar. There is the case of an old lady¹ who had met another girl Julia only once in her lifetime, when she was her guest for a week. Julia was a very good singer, and was training for a career, but later on married and the lady had no knowledge of her whereabouts. After some years, when the lady herself was on her death-bed the day before she died, she heard beautiful music and saw

^{1.} H. P. paragraph 718 A.

persons singing and among them was Julia. On inquiry it was found that Julia had died a week before, but her death was not known to the old lady, or anyone else in her house.

- 47. Persons on the other side of death not only find it easier to communicate with people on the verge of death, but seem to be aware of the impending change. One lady who had two sons. aged 3 and 1, lost the baby. The boy used to see the dead baby everyday after death, and it seemed to call him to the other side. To the boy the call was perfectly real and urgent; and he soon became sick without any apparent; cause, and in spite of all medicines and nursing, died within two months of the baby, assuring his mother that he was only going over to play with baby and asking her not to cry. Such evidence coming from a child of three, who could not possibly have any motive for cheating others, should be given the greatest weight in understanding such phenomena.
- 48. There is an instance of an actual compact, to appear after death. ² Captain Colt had another brother in the army, fighting at Sebastopol. They had frequent correspondence, and when once the brother was in low spirits Captain Colt wrote to him to cheer up and if anything did happen, not to fail to let him know of it, by appearing in his

^{1.} H. P. paragraph 717 B.

^{2.} H. P. paragraph 725 A.

room in Scotland. A few days later, the Captain suddenly awoke one night, and saw his brother from Sebastopol surrounded by a pale phosphorescent mist, kneeling by his bed-side. The apparition turned round his head slowly and looked anxiously and lovingly at the Captain, when he noticed a wound on the right temple, with a red stream from it. News was received a fortnight later that the brother was found dead in almost a kneeling posture, with a bullet wound in the same place, with the Captain's letter entreating him to appear in Scotland in his breast-pocket.

49. It does not seem necessary that the dead person should be aware of the exact whereabouts of the person, with whom he desires to communicate. There is a case on record of an English lady¹ who formed a friendship in India, with another lady formerly unknown. After sometime the first lady went back to England, and after a few letters their correspondence also ceased. A few months later, when the lady in England who had no reason to believe that her friend was not well, vividly saw her apparition, floating in her room in England, when even her address was unknown to her friend in India. She has died at exactly the same time, and as the bereaved husband mentioned later, his wife was very desirous of meeting the lady in England,

^{1.} H. P. paragraph 429 B.

while on her death-bed. Another instance is that of Rev. Elliot¹ who, while cruising in the Atlantic out of reach of post or telegraph (in days when wireless was un-known), had a vivid dream of having received a letter stating that his brother had died on a certain date. The news was quite correct. But the interesting part is that the whereabouts of the recipient were not at all known, and whoever sent the communication, was capable of finding out Rev. Elliot, "somewhere" in the Atlantic ocean.

- 50. Apparitions are known to speak. In one case² Sister Bertha, Superior of the House of Mercy, distinctly heard the sentence "I am here with you," and recognised the voice as that of her friend and former pupil Miss Lucy. But not seeing anyone, Sister Bertha asked "who are you?" and got the reply "you must not know yet." Next day she learnt that Miss Lucy had died twelve hours before the apparition.
- 51. Although it appears that such visitations from dead persons are very common just after death, there are instances of apparitions after some time. In one case³ six weeks after the death of a Captain Towns, his daughter with another friend on entering a bed-room with a gas-light burning all the time, was amazed to see reflected in the polished surface of the wardrobe the image of the dead father. There

^{1.} H. P. paragraph 739 A.

^{2.} H. P. paragraph 743 ▲,

^{3.} H. P. paragraph 741.

was no picture in the room and the image was no reflection. Four servants were called and they all saw and recognised their master. Finally Mrs. Towns was sent for. She too saw the vision distinctly, and on advancing to touch it, the figure gradually faded away.

52. Then there are cases of haunting, investigated by the S. P. R. with the same scrupulous care. One Mrs. M.1 had no idea that the house they took was haunted. On retiring one night, she thought she heard a peculiar moaning sound, as if some one was sobbing in great distress. As the sound continued for some time, she opened her window, and saw on the grass outside a very beautiful young girl, kneeling before a soldier in a General's uniform, sobbing and clasping her hands together. entreating for pardon. Mrs. M. ran downstairs and begged her to come in and tell her sorrow, when the figures disappeared. It was found out later that one of the daughters of the old proud family, to whom the house belonged, had been cut off by them and died broken-hearted. The soldier was her father, and she had pleaded for his pardon in vain. Mrs. M. some months later, saw a portrait of the General, and at once recognised him as the soldier in the vision. In another case, in what Myers calls one of the most remarkable and best authenticated instances of haunting on record,2 the lady haunting

^{1.} H. P. paragraph 745 B.

^{3.} H. P. Paragraph 751 A.

Morten actually made experiments to find out whether she had any material existence, by fastening fine strings across the stairs in such a way that they could not be seen, and yet be knocked away by any one passing them. The ghost passed through them, without in any way disturbing them. Miss Morten tried to touch the figure, but never succeeded in spite of great vigilance. She tried to corner the ghost, and it disappeared suddenly and in full view, or through closed doors with equal ease.

53. Automatic writings:—From hauntings. we pass on to automatic writing by table tilting and planchette, and the Psychical Society's records are full of literature on this subject. In London alone there were in 1927 more than four hundred places, where any one can try to communicate with the dead by such means, and in spite of frauds, which doubtless exist, any seeker after truth can, if necessary, satisfy himself of the genuineness of the phenomenon. Evidence has been accumulating year by year and practically every person, who has approached the subject in an inquiring and unbiased mood has accepted that the "dead" exist, and can hold converse with the living. Sir William Crookes, Sir Arthur Conan-Doyle, and last but not the least Sir Oliver' Lodge are not the names of persons, who can be brushed aside very lightly.

- 54. Sir Oliver Lodge's studies—Raymond— Of these we shall glance through the work of Sir Oliver Lodge, Professor of Physics and scientist of repute and Past-President of the Royal Society. seems that he became interested in Psychical phenomena in the early nineties, along with Myers, Crookes and other members of that band. As a member of the Psychical Research Society and later its President, he has taken a prominent part in the investigations carried out by that Body and recorded in their transactions. A reference has already been made to his experiments in telepathy, along with Mr. Guthrie. His scientific studies in these subjects took a dramatic turn in 1915, when his son Raymond died during the great war; and his account of these is published in his book "Raymond" (Methuen 1916). There he has given in detail all his experiences which are well worth reading. A bare outline is all that can be attempted here.
- 55. "Raymond was born in 1889 and studied mechanical and electrical Engineering at Birmingham and then spent two years at the Wolsley motor works. He read very widely, and even as a boy was noted for his overflowing vitality. He joined the Army out of a sense of duty and was killed in action in Flanders on 14th Sept. 1915.

Sir Oliver got the first intimation of the impending disaster as the following message from

Myers, through Mrs. Piper in America. "Tell Lodge, you take the part of the poet. I will act Faunus," "Faunus?" "Yes, poet. Ask Verall; she will understand". This conveyed nothing to non-classical people including Lodge. So he asked Mrs. Verall and received her reply on 8th August explaining that it was a reference to Horace's account of his narrow escape from death from a falling tree, which he ascribes to the intervenion of Faunus, the guardian of poets. Another message came in through Mrs. Piper on 5th August in automatic writing "Lodge, have faith and wisdom in all that is highest and best. Have you not been profoundly guided and cared for?"

Lodge first heard of Raymond's death on 17th Sept. On 25th Lady Lodge had an anonymous sitting with Mrs. Leonard, when a message purporting to come from Raymond was spelt out through table tilting. "Tell father I have met some friends of his."

"Can you give any name?" "Yes, Myers."

Two days later Sir Oliver had an anonymous sitting when the control Feda spoke;—"He finds it difficult he says, but he has got so many friends with him. There was confusion at first. He could not get his bearings, did not seem to know where he was. But it was not very long before it was all explained to him. People think I say I am happy in

order to make them happier; but I dont. I have hundreds of friends, I have instructors and teachers."

At the same time Lady Lodge had a sitting with Mr. Peters, when the boy said:—"Good God! Hitherto it has been a thing of the head. Now I am come over, it is a thing of the heart. How father will be able to speak out? Much firmer than he has ever done."

Then on one occasion Raymond referred to a group photograph taken in Flanders, completely unknown to the Lodges, and of which even the negative was not sent for printing on the date the message came through. A copy of the photo came in two months later. On another occasion the Lodges asked Raymond through a medium if he remembered "Mr. Jackson" (Lodges used to call a peacock by that name which a stranger could not possibly know of). The medium replied greatly puzzled "Yes, but he seems to mix him up with a bird." And so on.

56. Sir Oliver describes in great detail the various sittings with all its trivialities as it is often the latter which are of greater value as evidence. These experiments brought him such a firm conviction that men do live after death and that communication across the gulf is possible, that he felt it his duty to speak out, especially in view of the consolation

that it gave him and would give to thousands of others who had lost their dear ones so suddenly during the great war. That is why, Lodge says in his preface, he published his family affairs and exposed his own sorrow to possible scoffers. Another book by the same author "Science and human progress" (Allen and Unwin 1926) shows how the learned professor takes a perfectly scientific and synthetic view of all phenomena he has investigated. whether physical or psychical. Again he has summed up his findings in a little book, "Why I believe in personal immortality" (Cassel 1928). He concludes "My whole contention rests on a basis of experience and on acceptance of a class of facts, which can be verified at first-hand by others, if they take the trouble. I know how weighty the word "fact" is in science and I say without hesitation that individual personal continuance is to me a demonstrated fact." It is true that these views of Sir Oliver Lodge are not accepted by orthodox scientists, and it was reported that one of these scientists, who can not distinguish between a living rat and a dead rat, suggested to the Professor, that he ought to resign his fellowship of the Royal Society if he wished to hold such queer opinions. The reply Sir Oliver gave is worth recalling. He aked his friend to move the Royal Society to delete his name from their rolls. if they were convinced, that he was deluded, and: posterity would judge, as to who sought Truth.

- 57. Sir Arthur Conan-Dovle.—Sir Arthur Conan Dovle is another indefatigable worker who has spent years of his life in investigating this subject from a scientific point of view. He says "I should not exaggerate if I say that there are thousands of messages bearing upon the subject, very many of which have been collected in books and many circulated in manuscript. Their validity is attested by the fact that they agree remarkably among themselves, that they are often accompanied by information concerning this life, which proves to be correct, and that psychic phenomena which come with them point to their supernormal origin..... Far from being annihilated, our lives carry on in a far more intense and vivid fashion than before. We undergo a change of vibration (there is no simpler way of expressing it) but we change in nothing else. Our form at its best, our character and our knowledge are exactly the same as before."
- 58. Latest Researches.—Since the above was written in 1931, a great deal of additional avidence has been collected in this behalf, by a number of indefatigable workers and perhaps better examples of the same phenomena are now on record. But I have purposely retained the quotations from Myer's Book, as it was published as long ago as 1903, and yet, we find many men in the world who are asking the same questions over again. The names of few Books on

the subject are given at the end of the chapter, and those who really wish to understand the problem have now ample evidence before them. A very good idea of the present position can be obtained from the Prsesidential address given by Professor B. L. Atreya at the Psychological Section of the Thirteenth Science Congress held at Calcutta in 1943.

59. One very remarkable contribution is by Dr. Fredrick H. Wood in three Books recently published. These Books are based on the records of spirit communications received through the mediumship of one "Rosemary," an English girl of high education, and her own revived memories of a former life lived by her in Egypt 3300 years ago. Her chief spirit guide is "Nona", a name adopted by an Egyptian Queen, the wife of Pharaoh Amentop, III, of the XVIIIth. Dynasty, who ruled in Egypt about 1405-1370. B. C. These records claim to establish...(1) the survival and persistence of human personality after death even through millenia, (2) that man under certain circumstances, reincarnates again and again upon this Earth to gain experience, and to attain spiritual growth, and (3) to have revived the spoken language of Egypt of the time of Amentep III giving Egyptian scholars thousands of volcalised words and phrases, also songs and melodies, which have been phonetically recorded. some of these records having been witnessed by

independent persons. The records also throw much new light on the manners, customs, ceremonials, and religious principles of the time, and thus afford an entirely new method of Psychical and Historical research.

60. Conclusion—The dead do not seem to die.--I have tried to lav before the student the testimony of men like Myers, Lodge, Conan-Doyle who have devoted a great deal of patient thought to these subjects and to this list may be added the names of Ruskin, Alfred Russel Wallace, Sir William Crookes, Sir Edward Marshall Hall and others equally famous. Are we to dismiss all these as ignorant, credulous, or wanting in intelligence? Apart from all the evidence and opinions recorded by them, is it reasonable to imagine that a busy forceful personality, steeped into all sorts of activities while alive, suddenly gets extinguished and ceases to exist at the moment of death? The man with all his bones, muscles and nerves is there. His brain in which are stored up all the impressions in its numberless convolutions is there, and yet all that grey matter cannot think, reason or desire. tremendous energy which in the case of some persons electrified the whole world is now gone! Can. energy be annihilated like that? Where has it gone without taking with it even a grain of the matter, through which it was acting a moment before? Those who feel satisfied that this can happen are welcome to that conviction. Others might at least hear the testimony of Religion, which has always maintained the immortality of the soul, before they make up their mind.

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V. Science & Religion

61. No conflict in Hinduism.—We all live in an ordered Universe ruled by Law, and if both Science and Religion are based on these Eternal Verieties, there can be no real conflict between the two. The very name Sanatana Dharma—(Sanâtana: eternal, immutable, without beginning or end; and Dharma: that which holds together the world, that which binds, Religion)—makes this very clear. The Vedas are no more than "the systematized and orderly arrangement of knowledge," which is exactly what Science means; and Vaidic Dharma can be translated best as "Scientific Religion." book Manusmriti is really called Mânava-dharmashâstra—the science of the religion of a thinking man. So, at any rate in olden times in the East, they made no difference between the two. Dhanurveda, the science of the bow, and $\hat{A}yurveda$, not the science of drugs, but the secret of a long life, were as much parts of the Vedas as was, Yajurveda-Sacrificial Lore; and all were studied alike. Some specialized in one branch, and some in another. But the Great Ones paid attention to all departments of human knowledge. Have we not read the long list of subjects studied by Rishi Narada as recited by him to the Lord Sanat Kumara, and what does it not include? The ancients made no distinction between the *Iha*, and *Amutra*, here and hereafter. *Abhyudaya* and *Nishreyasa*—pleasure and profit—have been the aim of the wise at all times; and did not Lord Vyasa express his wonderment as to why men who loved wealth and enjoyment did not take to Dharma, which insures both?

62 Nor in Ancient Greece.—That was the position even in the West in olden days. The "Decad" of Pythagoras included the whole man. He accepted and taught the dual system of Logic; and showed people in Europe how a knowledge of the Universe can be gained only by trying to understand things from both ends = Spirit and Matter-from the universal truths, working downwards, to particulars verified by sensuous observation. That is why the Pythagoreans not only placed Mathematics on a scientific basis, but they developed the idea of a world of physical phenomena governed by physical laws. They also taught that the best and truest purification of the soul was scientific study. seems to explain," as Westaway says, " the religious note which is characteristic of all Greek science." After him, Socrates taught people the right attitude of enquiry, and even if his method often came to no practical results, he made every one who came in contact with him "fully conscious of knowing nothing"--the beginning of all knowledge. Plato, who came later, elaborated the Pythagorean ideas, and spoke of the Archetypes that existed behind all

things material—the Noumena behind the Phenomena. It was this which really provided the basis of the classificatory system in modern Biology. He regarded Truth as too great and many-sided to be capable of submitting to a dogmatic system. He was content to develop various aspects of truth on all the highest questions as they appeared to different minds, and at different times. He aimed not only at realizing the Universals, but at grasping them in and through particulars. He knew the value of both of the Deductive and the Inductive systems of Logic, and, in order that we may learn to think precisely, he encouraged the study of Geometry and inscribed on his Academy the phrase: "All non-mathematicians barred."

63. Aristotle—The Un-Greek.—How Aristotle, who was no mathematician, ever gained admission to this Academy, I do not know, but he was the foremost pupil of Plato for many years. To Plato the world of Ideas was the real Universe, of which the material world was only a faint copy, so all his teaching necessarily had a dreamy poetic form. Aristotle, the "un-Greek" as Humbolt calls him, who had completely neglected this aspect, could not understand or appreciate this perpetual "referring back" to Ideal standards—this constant soaring into the clouds on the wings of Intuition. He preferred to confine himself to what could be known for certain, so that he might be

able to express his knowledge in exact language. He it was who first started on the road of "hard facts," as we now put it. He insisted on careful observation and verification, and taught that all knowledge could be obtained by arguing from these facts. method was to rise from the study of the particular to the knowledge of the Universal, advancing by deduction. He laid down canons by the aid of which, every one can say for certain that "if a proposition 'A' is true, then 'B' is equally true." This method appeared well-nigh perfect, but how much did that little "IF" matter can now be seen from the fact that Aristotle (evidently following his own method) found no difficulty in believing in the spontaneous birth of young crocodiles from the mud of the Nile. Even that great Logician—the father of modern science, as he has been rightly called--could see no reasons to doubt that the earth was flat, as we can all see, whereas Pythagoras and Plato in their own dreamy way came to the conclusion that it must be a sphere. The net result of this rejection by Aristotle of Mathematics from Plato's Academy, was to make a permanent breach between Philosophy and Science—the former the "search for wisdom," the latter "the results of that search." The five solids, Pythagoras and Plato taught, served as the axes of reference for all things material, and curiously enough without these, modern science, the child of Aristotle, starting from "hard facts" imperfectly

understood, became almost a blind groping for

64. Alexander his great pupil.—It was this Aristotle who was appointed by King Philip of Macedonia as tutor to his son Alexander, who frankly owned that he owed much more to Aristotle than to his father, Philip. It is interesting to note that "it has been believed by some, not without ground, that Alexander's mind, so fired with ambition, was yet more inflamed by the too great value that Aristotle set upon honour and glory—which he placed in the ranks of things which may be called good—so that, he not only multiplied war upon war in order to extend his dominion, but would needs be looked upon as a God himself." The coming together of these two great men influenced the course of history in Europe not only in politics but in the realm of thought for many centuries. If Alexander built Alexandria, his companion Ptolemy, the "saviour," laid therein the foundation of a Great Library —a Temple of Muses—the Museum, which proved to be the birthplace of modern science, as Draper calls it. (Conflict between Religion and Science." by J. W. Draper—Watts 1927.)

Alexandria soon became not only the capital of Egypt, but the intellectual metropolis of Europe, where Aristotelian Logic, and his whole way of looking at things, held sway over thinking minds for over three centuries. This Museum more or less replaced the Ancient Egyptian Mysteries, which combined in themselves both Inner Wisdom and Outer Knowledge. Divorced from these Mystery Teachings, the exoteric religion fast degenerated into a number of popular festivals, which became State functions under the Romans, who hardly made any distinction between Jupiter and Caesar. All that was required of "good citizens" in matters religious was that they join in the State celebrations and sacrifice, and at least offer incense before the powers that be. As for the Philosophy that guided them, it can be judged from the fact that Alexandria soon became a focus of fashionable dissipation! In the allurements of its bewitching society, even the Jews forgot their patriotism. Rome was no better.

65. The coming of the Christ.—I said "even the Jews," because as a rule the Jews who lived everywhere were known for a fervent, almost fanatical faith, a fiery devotion, a stern uncompromising morality. They tried to keep aloof, and would not endure Caesar's image or offer incense before it. Moreover, they had a great faith in the idea that a Messiah would soon be born amongst them, cherished a secret expectation that such a Messiah-King would come in all his heavenly pomp to make Israel great amongst the nations of the world, and lead them to material glory. Such a Messiah did come in Jesus, the Christ, but the Kingdom he offered to

the Jews and gentiles alike was a kingdom not made with hands, but the Kingdom which each man had to find within himself, a Kingdom open to all who cared to enter if they had the necessary qualifications. Money or position was of no avail here. Each one had to seek entrance on the strength of what he was, and not on what he had. Rags could not hide, nor kingly robes prove the nobility of the Inner Man. The Christ did not bring any new system of logic or philosophy, but taught people to serve one another even as He served them, saving. "He that is greatest amongst you shall be your servant. " He taught people to love one another, saying: "This is my commandment, that we love one another as I have loved you." "Greater love hath no man than this, that a man lay down his life for his friends." It is worth remembering that Christ dealt with the inner attitude to life in all His exoteric teachings, and there are reasons to believe that He gave a knowledge of the outer details of the Gnosis only to a few selected and worthy disciples— His Inner Circle. A very simple religion for the masses: Divine Science for the few. Rather a paradox, but we shall see later how a reversal of this law has created all the present conflict between Religion and Science.

66. The Christ, by the sheer force of a noble, life, gathered round Him a few very devoted disciples who were utterly convinced of a glorious life.

beyond death, one which every one could be sure of not by believing in Him, as some supposed, but by believing in the Path He pointed out to them, and treading that Path regardless of any immediate pain it may involve. I have no doubt that it was due to the Christ's returning to them and teaching them after His physical body was destroyed, that His teaching of Human Brotherhood and benevolence took so firm a root. The Apostles went round preaching this message of hope and brotherhood, and groups were formed of people everywhere who were affected by it. Round them grew communities; each one threw into the common stock whatever he had. All widows and orphans were thus supported, and the poor and sick sustained. The head was the spiritual quru—their Bishop. From this, then grew the Christian Church.

67. The Rising of the church.—So the Christian gradually lived apart from others, who naturally looked down upon them as kill-joys, and people who disdained things which alone gave them pleasure, as in Rome and Alexandria—money, power and the State which was the source of all this. The Christ Himself did not disdain Nature and this world; only His way of looking at these was different. He was the Master of nature, not its servant. The Early Christians looked upon the material world as something which tempted them away from the inner Reality, and their fanatical fight against the pagans.

was really a fight against their own lower nature, which they had not overcome. They had inherited from the Jews the dogmatic and jealous worship of Jehovah, to which they now added this shrinking away from the world, which almost created in them a love for martyrdom—and they got it.

68. We have seen how the Jews would not bend their knee to Caesar, but the Christians threatened to pull down Jupiter himself. So if the Jews were guilty of treason, the Christians were condemned as atheists as well. They liked martyrdom, and they obtained martyrdom. Nero wanted some scapegoats after the fire and he found the Christians handy. They not only stood persecution well, but throve under it. Decrees and edicts for which people clamoured, by the very severity with which they were enforced, wrought a reaction in the minds of tender-hearted people, who went over to swell the ranks of Christians. Christianity thus spread into every nook and corner of the Roman Empire. so much so, that when Emperor Diocletian was concerting measures for suppressing Christianity. he found his wife and daughter amongst their ranks, The Church of Nicomedia was razed to the ground. In retaliation the Imperial Palace was set on fire, and it was soon found out that the Christians with their great "Faith and Hope" formed a powerfu party in the State, who had to be reckoned' with. After the abdication of Diocletian, Constantine, one of the competitors for the purple, quickly saw the advantage of putting himself at the head of the Christian party, which gave him in every part of the Empire determined men and women ready to encounter fire and sword on his behalf. Victory crowned his schemes in a decisive battle—and so he ascended the throne of the Caesars, the first Christian Emperor.

69. Bigotry and tyranny.—If the wife of Diocletian was a Christian, by a curious ironv of fate, the mother of Constantine was a pagan, and so were all the aristocratic families. In consequence he adopted a policy of not only permitting but encouraging concessions to old ideas. The pagan party counted amongst them all the disciples of the old philosophical schools (divorced from the Mystic teachings, as we have seen), who asserted that al knowledge is to be obtained by the laborious exercise of human observation and human reason. The Christian party asserted that all knowledge is to be found in the Scriptures, and in the traditions of the Church, and that in the Revelations God had given all He intended man to know. They claimed that the Scriptures contained the sum total of all knowledge, and so the Church was the depository and arbiter of all knowledge. Thus came into being the distinction between "sacred and secular learning" for the first time in history, the one relying upon Revelation and the other upon human reasoning as

its guide—the knowledge given by the Fathers and the Philosophers. The Fathers, with the Emperor behind their back, would brook no opposition; and being the dominant military power at that time. they never hesitated to enforce their decisions with the aid of civil power. Where the civil power proved inadequate, moreover, the monks took the law their own hands, as did those under Bishop Cyril, who Dium 11 murdered Hypatia in A. D. 414 Her fate, in a hundred years of the rise of Christianity to political dominance, was a warning to all who would cultivate secular or profane knowledge. They had won power after great sacrifices, and were determined to keep it. As Draper says: Church thus took a course which determined her whole future career, and she became a stumbling block in the intellectual advancement of Europe for more than a thousand years."

70. Prayer in Christianity and Islam.—The most notable attempt to combat this evil was the rise of Islam, towards the end of the sixth century. The Muslims, instead of mixing with the pagans and tolerating them, took a clearcut line with idolaters, and restored the doctrine of the One God. Both the Christians and the Muslims accepted a Personal God; but unlike the former the Muslims did not believe in His incessant intervention in favour of those who prayed to Him. To them the affairs of men went by divine decree, before which, every one

had to bend. It converted despair into resignation and taught them to disdain hope. That is what gave them, and still gives them, the courage to attempt things in which they might succeed if Allah so wills it; and they proved the truth of the proverb: "God helps those who help themselves." They believed in an iron chain of Destiny, in which each fact is a link, and stands in its preordained place—not one has ever been disturbed, not one has ever been or can be removed. So in the realms of science they naturally adopted the Aristotelian Logic of arguing from facts, and accomplished great results, until the vast Saracen Empire in Europe itself broke into pieces by internal dissensions.

71. If the Christian prayer was an earnest intercession for benefits hoped for, the Muslim prayer was an expression of gratitude for the past. Both alike substituted prayer for the ecstatic meditation of India, which alone can help man to get behind the phenomena to the inner Realities. Both believed in life after death, but they inherited from the older pagans and Jews the corporeal aspect and the personal God waiting to be propitiated. They took it that there is only one Judgment Day for all creatures in the world, and soon lost the idea of Reincarnation which the orientals had taught for ages. As the Encyclopaedia of Religions says: "The Church successfully withstood all attempts to introduce the Greek (Pythagorean) philosophy and

Eastern mysticism." Unlike the East, where differences of opinion are looked upon as good for discussion and not suppression, they became perfectly intolerant, and instead of a dialectical victory relying on argument and persuasion, they resorted to the sword and later the rack and the pyre with which to carry conviction. The Inquisition made torture a fine art, and perpetrated deeds of cold-blooded cruelty which have no equal in history. Al this created an atmosphere fatal to the growth of free thought—Philosophical or Scientific,

72. The birth of modern science.—But even the terrors of the Inquisition could not suppress Truth for ever. Twelve hundred years after Hypatia, Giordano Bruno once again proclaimed the Pythagorean doctrines, and the lurid flames from the pyre on which he was burnt proved to be the rosv dawn of modern science in Europe. The world had been opened up by intrepid sailors like Columbus. and the printing press had greatly helped the spread of literacy and knowledge. Galileo's trial focussed the attention of Europe on the problem, and his discovery of the phases of Venus by the use of a telescope had proved the Copernican system in the teeth of frantic resistance by the Church. Kepler and Newton gave a framework for the mechanical concepts, and Bacon did the same for mental concepts. And so science grew by leaps and bounds in Europe to what we see it today, and they have

brought it into the East again, together with the conflict between the Sacred and the Secular—the Church and the Academy—Religion and Science.

- 73. A review of science.—I have taken so much of your time with this very inadequate review of the history of Europe, only to show how this conflict and the need for a reconciliation has arisen on that soil. It never existed in India in the Vedas, the Smritis, or the teachings of the Buddha. Even in Europe, Pythagoras, Plato, Plotinus, Hypatia, and later Giordano Bruno did not make any distinction between them; and "if the Church had accepted his message the bitter conflict that waged between Religion and Science during the sixteenth and seventeenth centuries would never have broken out," as Dr. Besant has pointed out.
- 74. We have already seen how Aristotle first broke off from Plato's background of the Ideal world, and started on the road of "hard facts." Inasmuch as he at least had no excuse for doing so, one would agree with Bertrand Russell that "Artistotle was one of the great misfortunes of the human race." Sixteenth century scientists had to get on in the teeth of bitter opposition from the Church, and so, perhaps it was inevitable that they should strictly stick to material facts, where, even if they knew little, they were perfectly sure of that little they knew, and naturally adopted the Aristo-

telian method. We have already seen how Aristotle following his own method had no difficulty in accepting the spontaneous birth of crocodiles from the mud of the Nile, because all that his Logic could say is that "If 'A' is true then 'B' is true." Oh, that IF!

Is "A" true? How can we be sure? The criterion must be such that everybody must be able to verify the truth, quite free from the personal equation which vitiates every result. So they stuck to what can be measured and compared with known standards—length, breadth and depth, weight and time in seconds, etc., etc.—whatever yields to these is an exact science. If anything can get into a test-tube, they can say what it is by noting the reaction to various agents.....to them the Universe consisted of seventy-two bricks which could never be broken up and alchemy was all foolish, until one day they found all that upset by one brick flying to pieces and yet retaining the properties of the brick all the time, and so on.

75. Inorganic matter yields to such treatment. Material things can thus be accurately measured, and the mechanical effects produced by forces like electricity are capable of exact measurement, and in these realms modern science has achieved wonders. Some of the ways that have been devised, and the apparatus that has been

rigged up to make such subtle forces yield results, call forth our highest admiration. Man has created machinery by the aid of which, as it were, he has grown from the stature of an ant to that of an elephant in one century; and in mechanical realms man is now well-nigh supreme. But when it comes to the phenomena of Life he finds himself somewhat helpless. He can classify all animals, understand generally their bewildering variety, their habits. their anatomy and physiology—but that is all. How the garden plants manufacture their exquisite colours from the cowdung upon which they feed, or how the tiny glowworm gets his cold light are things which he cannot fathom, and when it comes to the behaviour of Human Beings, his exact knowledge comes down to very little. Even in dealing with matter, with the enormous disruptive forces that electricity supplies, he finds himself in a region where matter itself is being born and perishes, and becomes so confused, that he has begun to wonder if there is any Law in the world at all. He has reached the end of the road on which Aristotle and Newton started him, and on which he walked with such confidence and determination, and is now speaking of "Indeterminism and Probability." When it comes to the phenomena of Death he simply folds his hands.

76. There are other Societies like that for Psychical Research which are doing great work in

these realms, and now they have accumulated an amount of evidence which compels the attention of all thinking men. But here, again, it is worth remembering that man has followed the methods of modern science, the only methods known in Europe, and he finds that they are not fool-proof. So the Royal Society naturally hesitates to accept the results. Obviously Aristotle can take them no further, and it is time for them to go back to his master, Plato, or Pythagoras, or to the Source from which both drew their wisdom.

77. The problem today. Modern science has great achievements to its credit, which create in the minds of its votaries a certain sense of selfsatisfaction. The bitter memories of the rack still persist in Europe, and, though active opposition between the Church and Science has now died out, it has given place to a tendency amongst these men of science to look upon religion as something to be put on the scrapheap. At the same time anyone can readily see that the powers that science has released and placed in the hands of mankind have not been an unmixed blessing. If Aristotle, the father of modern science, gave us one Alexander, science has given us hundreds of Alexanders who battle for supremacy all the world over, and now we are in the midst of horro s the world had never seen before. Religiously—inclined people shun science, and want to go

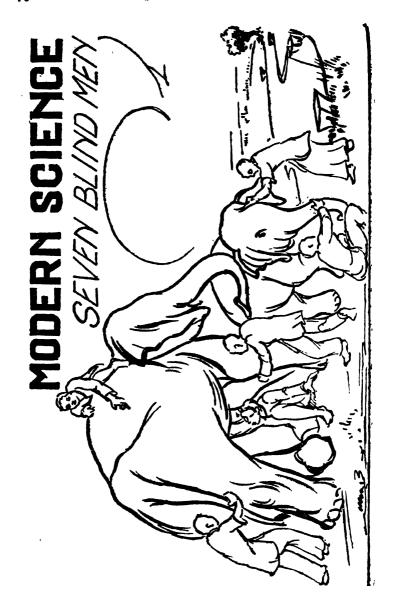
back to the good old days before modern science was born. That so-called religious people have perpetrated in the name of religion the most horrible atrocities for centuries past must be admitted, but perhaps man has created more misery in one century by the very misuse of science. It is neither religion nor science that is responsible for this; but the divorce between the two. The two are like acids and alkalies, both corrosive by themselves, but, properly mixed, give a neutral salt very necessary for the growth of mankind; hence the necessity for a reconciliation between the two.

78. In India this is further complicated by the fact that Religion is said to make men "other worldly:" and many modern Indians who want to get on in life hate religion on that account. Dazzled by the discoveries of modern science they are unable to see anything beyond, and do not want to do so either. We would only like to tell such people that there are many Thinkers even in the West who do not consider that science and human progress have gone together. Religion has definitely proclaimed that this visible world, which we can put in a test-tube is not the only world existing, and that there are other worlds, the laws of which it would be foolish to ignore. Religion tells us that death in one world is not an end, but only a passage to another world. Modern Science deals only with the

Physical Universe, Religion with the whole; and so it is that our seers have asked us to attend more to laws which obtain in the unseen world. Obviously these laws cannot be incompatible with those obtaining in the visible world, nor are they to come into operation only after death, as some people imagine. Religion tells us that we are all of us living in all these unseen worlds here and now. If practically everything we experience in our world is the result of forces set in motion in the unseen worlds, our worldly man who really wants to get on, would seem to be in greatest need of Religionor as Hinduism calls it-"Dharma-That which holds together the whole." Victory follows Dharma; and cannot be achieved without it. Just as a shadow follows a man who walks with his face turned towards Light, and only as long as he does so, so does material prosperity follow a man who faces Dharma. That is what our Seers have told us.

VI. Reconciliation between Religion and Science

79. Science of the seen-vs-Science of the unseen:—Now in this problem the first thing to recognize is that conflict is not between Religion and Science at all, but really between "the science of the seen, and the science of the un-seen'-Physics and something beyond Physics, Metaphysics -Modern Science and Occultism. Science knows full well and has to admit the existence of forces beyond its ken, but it does not recognize them until results in this material world are capable of exact measurement. To it the rest is unknowable—the scientist likes to call himself an Agnostic, and he calls this the only rational way. To a blind man the sun does not exist, but is it rational for him to assert there can be no such thing as light? We are familiar with the words "Hindu-Muslim tension" and we all realize too well what it means when there is a riot, and yet, because no instrument can measure it in any terms, is it rational to deny its existence? Similarly, there are hundreds of things in the physical world waiting to be explained, which modern science, great as it is, is utterly unable to account for. Modern scientists with few exceptions remind one of the number of blind men who were



asked to describe an Elephant. One who got hold of one foot was quite sure and rightly too—that the animal was like a pillar, while another person who got hold of the ear was equally certain that the elephant resembled a fan. Both were perfectly correct as far their knowledge went; but were not justified on that account in claiming that they knew all, or even that no one could possibly get an idea of the animal as a whole.

Instead of being content with a merely agnostic attitude we must try to rationalise these things, try every hypothesis we can think of, and see if it fits in.

80. Occultism Explains:—Here, then, is the role of Occultism, which assert that our Universe is a vast world having many dimensions, of which what we see is only an ever-shifting three-dimensional section, and no more. It is by no means a fortuitous concourse of atoms, but is a perfectly ordered whole, in which everything is governed by strict and exact unchanging laws. In Occultism there is no Indeterminism, no Probability, and no miracles either. It is only the ignorant who use these words. To the villages the vehicles that run without a horse, or the lamp that can be lighted without a match, are miracles, but not so to us. Occultism likens the visible world to that part of an iceberg above water which we know is only one-

seventh of the whole. If such an iceberg were to enter the Gulf Stream the melting of the lower parts would completely upset the balance of the whole, and if modern scientists lived upon its surface they would never be able to account for the phenomenon with their most delicate instruments. Material things obey Newton, but when we get to the borderland and try to break up an atom, we are trying to go deeper into the iceberg, then our results become erratic. When we come to the behaviour of living beings, we can classify them and note the habits of the average in ordinary circumstances, but especially in the case of man it is simply impossible to predict what he will do, because consciousness has layers—subliminal and supraliminal—which we are unable to get at, by means ordinarily known to science. But these deeper regions exist all the same.

81. Now Occultists claim that they can observe things happening in these invisible worlds, just as we do in this visible portion, and learn a great deal of the laws that govern them. For instance, they say that "thoughts are things," that "man does not die when he dies—he merely enters the invisible world, and, after a time, again puts on this vesture and comes down to the earth to meet the same old people, and, so to say to settle accounts with them." Again, "All Life is One, seemingly divided into tiny bits," and so "the relationship of all is essentially

that of Brotherhood,"—As one occultist has told us:

- "While in no way deprecating the knowledge to be gained by the study of the ancient Scriptures, or by scientific or philosophical reasoning, occultism nevertheless regards the constitution and evolution of man as matters not of speculation, but of simple investigation; not of vague theory, but of definite fact-Its statement is perfectly clear; the past, the present and the future of man may be examined by all who take the trouble to qualify themselves for the study. When so examined, they prove parts of a magnificent scheme, coherent and readily comprehensible a scheme which, while it agrees with, and explains much of the old religious teaching, is yet in no way dependant on it, since it can be verified at every step by the use of the inner faculties, which, although latent in the majority of mankind, have already been brought into working order by a considerable number amongst our students."
- 82. Occultists are Men of Science—These findings are placed before us in a perfectly scientific manner for our examination and acceptance, only if they appear to us to fit into a consistent whole. This is done in a religious spirit. Our scholars, who study comparative Mythology, are convinced that all religions spring from the same seed. "The ignorance of a child humanity, watered by cunning

priests, grows into what goes by that name." The Occultist accepts the common source, but he asserts that religion is also founded on the Eternal Verities, which science itself seeks to discover; that the child humanity has Elders, and Fathers and Mothers who take care of him, nourish him, and look after him generally, until he himself-the child humanity-grows into Their own likeness. It is these God-like Men who are often worshipped as God Himself. The anthropomorphic way of looking at Them is obviously absurd for the simple reason that "They see the One in the Many-and the Many in the One." "Their consciousness has its circumference everywhere, but centres nowhere." They are the Saints who are one with the sinner, yet different inasmuch as they understand the reasons and the solution of his problems as well. There cannot be the slightest touch of anger, jealousy, vengeance or other weakness common to man, in Their consciousness. That is the simple goal for all of us, and They are a guarantee that we shall one day be what They are today.

83. They are Omniscient and Omnipresent, because everything is within Their Consciousness; They are Omnipotent because They know all the Laws of God and manipulate all Forces, and cap do almost anything so far as matter is concerned. But inasmuch as the least of us is a spark of the same

One Flame, the only thing They cannot and will not do is to force the growth of any one of us. They advise. They help, They watch over us as a mother watches her first-born, and are content to wait until we learn our own lessons. They are perfectly Happy--because there is no better word expressing Their exalted condition. They have passed beyond the necessity of putting on this vesture of flesh, but do so incarnate to help us, not to make us happy. but to teach us how to be happy. That is the Idea of God and his Agents, Rishis, Devas and Angels that the Occultist places before us, again in a perfectly scientific manner for our examination. Herein lies the true way to a Reconciliation between Religion and Science. Aristotle's hard facts?--ves, by all means: but not without Plato's Ideal World. which he rejected. For want of a reference back to this framework, modern science has gone astray. with the results we see.

84. If Religion or Dharma deals only with the Laws of Life, it is quite logical to ask of the seer as to how he got at these Laws. Such a question is perfectly consistent with the attitude we laid down for ourselves and an earnest seeker after truth was never discouraged from asking such a question in Ancient India as we have already pointed out. All that is expected is that the seeker will go to the Teacher, or the Books which speak for him, not with any preconceived notions, but with a perfectly

open mind. No blind belief is required of him, but he must be willing to trust his teacher at least up to a certain extent; he must make an honest effort to understand the point of view placed before him and be prepared to give it a fair chance. Obviously no teacher can help a student, who already believes that he understands the subject better than the teacher. That is a caution we all—especially those who are proud of the achievements of modern Science—have to bear in mind, in approaching the study of Religion. That is certainly not an exorbitant demand nor in any way unscientific judged by Bacon's standards.

85. Objective Methods.—Another thing which has to be borne in mind is that there is nothing wrong in religion demanding its own methods of attacking its own problems. We all know how in a physical laboratory, we measure the length, breadth and the thickness of an object, how we weigh it and calculate its density. We find its elasticity, its tensile strength, its ductility and other physical properties with diverse instruments. In a chemical laboratory we begin in quite a different manner. We put it into a test-tube. dissolve it in some way, and try to resolve it into its numerous elements. If it is an organic substance we take it to the Biological laboratory and examine its sections under a microscope, and classify its component parts in a yet different way. We do not insist upon the chemist

using the verniers, or the Biologist using the test tube. In each place we follow different methods to suit the purpose in view, and so does Religion.

86. The methods used by modern science may be described as objective and they are very useful as far as they go. In dealing with inanimate things they do give us quite an amount of information, but when we come to life, a little consideration will show us that they do not carry us very far. Suppose we asked modern scientists to describe the difference between a mango and a banana. The physicist would tell us their dimensions and average weights accurately; the chemist the proportion of Carbon and Nitrogen in each and perhaps the names of organic acids: the Botanist would tell us the species and the genus and the Latin name for each: but will the best of these descriptions written by the most eminent scientists ever give a stranger, who has not seen the fruit, even a faint idea as to how a banana differs from a mango? All these objective methods of modern science do not avail us of much, but.....there is just one more methodeat both. Convert both the fruits "Look at the things—from wi yourself with them—i. e. sulfectively.'
gion. That is only a difference of methodure not unknown to science asself. To
Gravitation was formulated by Newton an apple fall down but thousands

have seen millions of apples drop down, and even Newton himself must have seen them coming down a number of times. There was nothing particularly wonderful in that particular apple that gave the inspiration to Newton, but he had been thinking over this problem for a long time past, and the knowledge came to him not from the apple but from mithin. Archimedes discovered Specific Gravity when floating in his bath tub, and was so beside himself that he cleanly forgot to put on his clothes before going out into the streets. All real knowledge comes when people are inward-turned, and in a state which the world would call madness. If the ideas "came" into the head of Newton or Archimedes, they must have come from somewhere and all that Religion does, is to ask us to get at that "somewhere" whence, it asserts, all knowledge is derived, and to which the shortest road lies from within and not through a forest of test tubes and balances.

87 The subjective method—more suitable to Life—We have seen how the objective method does not help us much as soon as we come to the phenomena of life, but when we go on to life at a higher stage—say to the study of human crime—the objective method proves utterly inadequate. A modern scientist may note down thousands of ways in which crimes are committed, and then classify the crimes, try to correlate them with the shape of

the criminals head or his facial angle, or analyse the various motives and idiosyncracies placed on record; and generally help us in dividing criminals into a hundred categories. He will no doubt make it easy for us to understand the criminal, but if we want to convert him into a good citizen we have to turn to the Saint, who perchance will place his hand on the criminal's head, and have a dip into his consciousness. The Saint will not classify the criminal but identify himself with him and all his thoughts, and grasp his problem in a manner, far better than the man who measures his facial angle. While he does so he will retain full possession of his knowledge of the Laws of life and applying them to the criminal's difficulties, not only understand his problem, but the solution as well. Thus Narada did convert a highway robber into the sage Valmiki. problems are due to the disharmony between life and form, and you can attack them from either side—subjectively or objectively and no scientist need quarrel with it,

88 Occultism, the religious way of studying science—or the scientific way of understanding religion has its own methods of research, and its own standards. It demands the fullest attention to facts, the Truth, and nothing but the Truth, but it insists upon the qualification of Real Love first. In Occultism, Abhyasa and Vairagya go together. That is why, unlike modern science, it is always a blessing,

It cannot but be that because it never a curse. knows that "knowledge is power," so it gives its knowledge to the worthy, and to the worthy alone. That is the explanation of the paradox I pointed out before—that the Christ gave His highest science to His Inner Circle, and His religion of benevolence to every one. That is why He told His disciples "not to cast pearls before swine," That is why an Occultist demands a certain amount of moral perfection in his pupils, before he can accept them. He is willing, nay, eager, to teach, and the hesitation is not on his part. The syllabus of his admissionexamination is broadcast in the world in simple little booklets like "At the Feet of the Master, In His Name," and so on, but he is sorry that out of millions only a few make an attempt, and of those very few reach Him. It is this insistence upon the moral stature of the pupil that makes all the difference between Occultism and modern Science, and that is precisely what people do not like. We have been taught to believe in the equality of man, ignoring the fact that what is easy and natural for a man at one stage of evolution, is not possible for another, who may be a younger Jiva. Occultism also asserts that we are all sparks of the same Flame, but all the sparks do not come out at the same time, nor do they grow in the same manner. And so there is the inevitable difference in the stage of their development. We are all essentially equal, but actually not so in point of time.

89. Dangers of the objective method.—We have already seen how during the last 15 years, especially after the first great war, when the appalling bereavement gave a great stimulus to this subject, spiritualists have partially torn the veil round the dead, by following the objective methods of science. We might certainly learn something of the dead in this manner, just as we might try to study all the animals in a zoo, by entering every cage on a dark night; but that would be considered a dangerous procedure. Conon Doyle himself records visits of entities which do remind one of the zoo: and the cases of dead entities exercising undesirable influence over the living are neither unknown, nor rare. This is not difficult to understand if we bear in mind that a "dead" man is not likely to be necessarily more intelligent or virtuous than he was ten minutes before his death; and the world of the "dead" is perhaps as full of ignoramuses and rogues as the one from which it is recruited. When the spiritualist tries to open the door between the two worlds, the "spirits" which try to scramble through the chink may not be very "spiritual," and a conference with such an entity is hardly calculated to increase our knowledge, even if it does not prove positively dangerous.

Far from forbidding such intercourse, religion enjoins it under proper safe-guards, as in prayers for the dead, but tries to discourage it in other cases. Religion maintains that however excellent the methods of science may be as regards the "form side" of life, they are unsuited to the study of life itself. It therefore recommends the "subjective" method as being the safer of the two.

90. In thus asking us to go "within" ourselves for the solution of our life's problems, religion does not leave us to our own resources, but gives us detailed directions for the purpose, as in a manual of practical chemistry. Only the laboratory will now be within us. Every religion contains such instructions open or veiled; but perhaps they are nowhere more clearly and more openly stated than in Hindu books on Yoga, which is nothing but "the rational application of the laws of the unfolding of consciousness." Even a cursory glance at a book like Patanjali's famous aphorisms will convince any one that it is not a vague, dreamy, airy-fairy business, but an exact science. It is a systematised application of the laws of Psychology, and his analysis of the subject ought to satisfy the most fastidious modern scientist. Yoga is as much applied Science as any other that the West recognises; and it is perhaps the privilege of the East to contribute this to the knowledge of the world. How shall we ever achieve that end if we Easterners consider ourselves a "mere fortuitous concourse of atoms," because some peoples in the West could not see any further?

- 91. The first thing is to feel logically convinced that such things can be, and then will come the practice. In thus inviting the attention of the reader to the possibilities of Yoga, it would be wrong to omit the warning repeatedly given in these treatises, that Yoga has its attendant dangers, just as Chemistry has its own, The mixing of two chemicals, as every one knows, may produce a most dangerous explosive, and if Yoga deals with mind—dissociated matter—it is not surprising that any mistake in dealing with it, may release tremendous forces locked up within the atom, and cause greater destruction. The path of Yoga is strewn with people who have wrecked their health, or have entered lunatic asylums for want of proper guidance, and that is why this knowledge has always been guarded in all religions. more or less successfully. The existence of such knowledge and Teachers who will help is well known. But for the seekers' own sake. the Teachers demand a certain degree of moral perfection, before admission. In doing this they can have no possible motive except our own happiness.
- 92. We have already seen, in this science of the unseen, that thoughts are things, enabling every one to come into contact not only with the external world, but with the creations of his own mind as well, which entirely depends on

the stage of our individual evolution. It is therefore true that every one of us is not ready for occultism, and that is why we have a good deal of what Mrs. Besant calls "semi-occultism" in the world, where one aspect is emphasized to the detriment of others, or what is, rather, far more pseudooccult—where some little fragments of truth are distorted to bring quick results in terms of physical or mental indulgence. We have to guard against this most strenuously, as all these bypaths do not help us to reach the goal of our endeavours, namely, "Seeing the One in the Many."

93. It takes us on to the road of psychic powers for selfish ends. That is why in true Occultism we are told: "Have no desire for them. To force them too soon often brings in its train much trouble; often their possesser is misled by deceitful nature-spirits or becomes conceited and thinks that he cannot make a mistake." The Siddhis are only an extension of our control over Nature, which can be used for selfish ends, exactly as money or any other thing can be misused, and perhaps its misuse is far more dangerous. H. P. B. has told us that as compared with the forces that we may come into possession in that way, our dynamites are toys, and so perhaps it is well that we do not believe in them.

94. Combine Religion with Science.-Modern science in spite of its misuse has helped its true devotees very greatly in disentangling its astral from the mental, splitting Kama-manas into Kama and Manas to a certain extent, to put it in Theosophical jargon. But unless and until we can join up the Lower Manas to the Higher, and thence to the Buddhi, science will always prove a curse. That is, it must be permeated by what we now call Religion. We must constantly refer everything back to the Idea behind things and the Great Plan of which all Ideas form but a part. We have to learn to see the Many in the One, through Science and Occultism: but we have to see the One in the Many as well. That is what the Mystic tries to do. He seeks to retire within to find the Great Reality. The Scientist knows the Mystic, feels. Both are very necessary but both must go together. The Head, the Heart, the Hand-all must work together, in the service of the world.

VII. Religion and Morality

- 95. Many want morality but no Religion.— There are many people in the world who do not dislike or hate religion as the source of all evil, but see no necessity for it. They maintain that a man can get on quite well in life without religion and that very often a so-called irreligious man proves to be a better citizen than the religious bigot. Looking at it from the point of view of Society as a whole, they say that as long as a man is a useful member of society, it does not matter in the least what church he attends, or whether he goes to church at all. Why any individual should at all subordinate his pleasure to the well-being of Society as a whole, they can not explain, but they do admit that he must do so; and so to them a code of morals. which governs a man's relation with his fellow beings, is quite sufficient. They do not mind "Moral education" but of religion they would have none.
- 96. Religion not a Sunday affair.—If religion was really a Sunday affair, as these well-meaning people obviously take it to be, their demand, that a man's conduct from Monday to Saturday is of greater importance, would be very reasonable. But they forget that a very common complaint against

Hinduism, at any rate, is that it interferes too much with individual liberty, down to laying down what a man ought to eat and when. Some educated Hindus, who do not like the restrictions—and who relish restraint, repeat a phrase they have heard used in the West that "Religion is a matter between man and his Maker." Our whole contention from the beginning has been that Religion is neither a Sunday affair, nor a parley between man and his Maker, but a statement of Laws which govern the whole world, seen and unseen, including lessons for daily conduct of life, some of which go under the name of morality. These are, no doubt, of very great importance, but they are only a part, one aspect of the whole. A tenant in a chawl may reasonably confine his attention to his own room, but for a builder to neglect the foundations were a folly. A nation is what its educated men make of it; and that is why we would like them at least to look deeper.

97. Knowledge gained in three stages.—The fact is that the whole creation is triune in nature, and none of these three parts can be really separated from the others. All knowledge or search after Truth can be divided into three stages-Observation, Intellection and action. We first note how things happen and store the impressions in our brain. Then we connect them and try to find some sequence between them; some things become the cause, others

the effect, and from these we formulate a Law. Then we use the knowledge. Knowledge for the sake of knowledge is a meaningless phrase, because knowledge is infinite—the British Museum has more than 20 lakhs of books all full of knowledge—and it is utterly impossible to have all knowledge, at any rate according to our methods. We can have only that part which we need and can put into practice. So we use our knowledge-not necessarily to make money—but we make use of it all the same, and then perhaps we observe some fresh phenomena which suggest a new aspect of Truth, and so on. The whole process goes round and round in a circle, or rather in a spiral along which we ascend all the time. But the trinity--observation, intellection and action--remains there all the time.

98. Theoretical & Practical men—old, old quarrel. Take the Science of Chemistry, for example. We observe a number of reactions, we build a series of theories on these, and then use Chemistry for washing clothes. Very often division of labour comes in, and those who observe reactions do not necessarily wash clothes. Once the process is well-known, a dhobi can and does make better use of Chemistry, and he often gets on in life much better than the B. Sc. can, and proves himself a more useful member of Society. As long as he is dealing with known ink-stains he is quite all right, but if a new ink is put on the market, which does

not yield to his washing powder, the dhobi is powerless. He has to go back to the starving B. Sc., in his laboratory, who puts the new ink in his testtube, pours in different reagents, observes the reaction, deduces a law and tells the dhobi what to do. The three aspects cannot be separated for long. Similarly a draftsman can make a better drawing than the architect; a maistry can build an ordinary house better than an engineer, and a barber can understand the difference between razors of different makes better than the metallurgist. All these practical people can get on better than the B. Sc. within certain limits, but as soon as the conditions change, they are at the end of their wits and the search for Truth has to begin over again. When we wish to build a bridge across the Firth of Forth with a span of 1800 feet, the maistry is useless. We need a man who understands mathematics, and who can tell us what the exact size of the girder ought to be. We then trust our lives to his "theory," and not to the maistry's "practice." This is a controversy of long standing between the "practical man" and the "theoretical man," the old, old quarrel between "Karma-Marga—the path of action" and the "Dnyana-marga—the path of knowledge." Both aspects are essential and so is the third aspect of "Bhakti-devotion," which supplies the mainspring of the clock. The world is verily a "Trinity-an undivided Unity," and we cannot divide it.

99. Moral laws act slowly—and need sanction.—Religion has also three aspects. First comes observation, truth as experienced by our Seers and Prophets, who have so kindly recorded it, for our benefit, and which we can verify for ourselves by methods laid down in the Science of Yoga, if only we are prepared to take the trouble. Then comes intellection, the theories which suggest cause and effect, the various systems of philosophies found in every religion. And lastly, comes action, the rules of conduct based on these philosophies which include morality. If a man follows all the rules of conduct in the proper spirit he may get on in life much better than the philosopher, like the dhobi, we spoke of before, but that is not equally easy. The dhobi is essentially a practical man, but even he observes the reaction of his washing powder on his clothes and draws inferences and within limits he is theoretical as well. If moral laws acted as quickly as the bleaching powder, that would be all right, but unfortunately it is not so. However fine they grind God's mill, grind slowly, very slow for many of us, and when a moralist is crying himself hoarse before you asking you to be honest, you can not help seeing hundreds of dishonest men prospering in front of your eyes. The temptation to get rich like others by dishonest means is very great, and mere moral commandments are seldom powerful enough to keep a man from following a wrong path. Take an example:

A father on his return from office sees ink spilt on his fine carpet. He becomes angry and holds a court of inquiry. The children in the house are brought before him. He preaches them the great moral law, that one should always tell the truth, and asks them to confess if any of them spilt that ink. A young hopeful comes out and says "Father, I did it." A further lecture and three slaps is the reward he gets—in a very large majority of cases—for telling the truth. Is it surprising that the child decides in his heart of hearts, that telling the truth does not pay? A stranger calls at the house. The father tells the child to go out and tell the visitor that Daddy is not at home. The boy does so, and if he has any brains at all he resolves that one should always talk of telling the truth but never do so. This is "moral education" the result of taking the essential rules of conduct, dissociated from the other aspects.

100. Is Conscience enough?—Mere moral commandments have no sanction behind them. They are like an ultimatum to an enemy, without an army to back it up, and both are equally futile. Attempts have been made to get this sanction by postulating a "conscience." It is claimed that every man has an inner voice in him, which tells him what is right and what is wrong, and that it should be taken as the basis of morality. People, who believe in this, argue that a nation may safely

commit the moral direction of the young to this inner voice or 'conscience.' They ignore the fact that "conscience" is a variable quantity and is coloured by communal, national and even family considerations. It is nothing but the sum total of the experience of each individual-in this and past lives—and depends upon the stage of evolution he has reached. It is useful under conditions to which the man is accustomed, but in a new set of circumstances it entirely fails. Some of the worst crimes in the world have been committed by persons whose inner voice thus failed to guide aright. The Spanish Inquisition was founded and carried on by men who conscientiously believed that they were serving God by the torturing and burning of heretics, and that they were really using a surgeon's knife to cut out from the bosom of Society, the cancer of heresey. All the horrors of the last few years are but the natural result of the actions of a number of people who conscientiously believed that they were right in doing everything they did. This will show how very variable and so, unreliable is the guidance which an average man can receive from his inner voice. Every man has no doubt a conscience, but if it happens to be "the con science of a fool, "he will commit mistakes.

To base a whole code of morals on individual conscience is like founding an edifice on shifting sand.

101. Utilitarianism. There is another school of thought which advocates that an action should be judged as right or wrong according as it leads or does not lead to the greatest good of the greatest number. They argue that every one of us is protected, guarded, educated and nurtured by the whole of humanity, which has gone before us, and therefore we are bound by honour and sheer honesty to add something to these accumulations by our own labours, so that we may pass on to posterity a richer and larger legacy. It will be noticed that "honour and honesty" have here to be assumed: and where these exist a further stimulus would, we admit, be unnecessary. That some of the noblest of men like Clifford or Charles Bradlaugh have worked for humanity for no better motive is a fact. But how many people can we find in the world, to whom a sense of duty to posterity would be a sufficient inspiration? An average man is likely to ask "What has posterity done for me, that I should work for them?" As for present Society which enables him to enjoy the fruits of his labour by maintaining law and order, he agrees to abide by the Criminal Procedure Code, but can see no reason for going beyond it. For instance he knows that operations on the stock exchange, by which a few clever men make money at the expense of hundreds of foolish and ignorant men, are a form of robbery, which causes greater suffering than burglary: and yet as long as it is legal, it does not jar on

the moral sense of the average man. The weakness of the utilitarian basis lies in the fact that it fails **except** when you appeal to the noble-minded, to those who need it least. These certainly will respond to it, but others feel inclined to shrug their shoulders when they are asked to suffer for the whole of humanity. As long as we take only one short span of life, that is inevitable, but when we add to the idea of utility, the other fact of immortality, things assume a different aspect.

102. Utility combined with Immortality--Religion.-- This leads us to the question of life after death, which is admittedly the province of religion. In most countries of the world therefore religion has been made the basis of morality by our Prophets and Seers. Our wise men have for centuries past used praises and threats, rewards and punishments, suited to the age and intelligence of the adherents of each religion. Ignorance has often distorted the sure sequence of a moral Law into an avenging Deity; and many self-seeking and ignorant priests have no doubt used these truths for terrorising the simple and timid. But none-the-less have the religions of the world trained their believers into a practical and useful morality. It has been said in mockery, but the saying embodies a great truth that Religions have been the Police of Society. However much we may dislike it, we must admit that fear—whether of jail or hell—is

one of the motives which curbs the strong, and greedy, and spreads a shield over the otherwise defenceless victims of their rapacity.

103. Oneness of Life, the surest basis for morality.--Life after death and possibility of reward and punishment therein, is not the only motive religion offers for being moral. For those who have grown above these, all Religions proclaim the Unity of creation. Some say that God is the Universal Father and mankind are His children: others say that there is but one Great Truth from which the whole world is created and into which it will dissolve. Still others say that the whole creation is governed by One Law, which is Universal in its application. Whatever the name, all religions teach the Unity of Life. "If you and I are one, one Life, one self, though in two forms. then if I injure you I injure myself; if I lie to you. I lie to myself; if I cheat you, I am cheating myself, and all the pain I give you is bound to come back to me in God's own time. If I want happiness I can get it best by making others happy." Therefore, do unto others as you would be done by, for he and you are one. The whole purpose of our existence is to realise this Unity in Diversity says religion. That is the Great Law of Life. When we try to oppose the Law, we suffer pain, when we obey, Bliss is assured to us. All acts against the Law are sins, others meritorious. The Law is

Omnipresent, Omniscient and Omnipotent. You may take the Law as a cruel tyrant if you please or as a Loving father who has your happiness at heart if you are so minded, Being immortal none of us can escape Him, and His presence behind is the surest guarantee that the moral laws will be enforced. These considerations have made for centuries and still make a powerful appeal to millions of men; and even if it were entirely unnecessary in the case of a few evolved persons, who can be a law unto themselves, it would be unwise to throw away this great educative force in dealing with mankind at large.

104. Religion has inspired Art & Literature.-Religion not only supplies the necessary sanction to morality, but it has in the past been a great inspirer of Art, as is exemplified by the wonderful temples. churches and mosques all over the world. most beautiful buildings in every nation till recently have generally been "Houses of God", and connected with religion in some form. Hundreds of artists have toiled for years on the most lavish decorations, thousands of paintings, innumerable statues and images, out of love for God. now where money has replaced God in various departments of life, I have seen a saint's disciples building for him a resting place, far better than all the municipal and Government buildings in the town. They were working not for wages but.

out of love for their Guru and their religion supplied the necessary incentive.

Religion has been the foundation of great literatures in the world. The mighty and marvellous literature of India is mostly religious, and has been kept alive for us, by the now-despised priests, from mouth to mouth through centuries, when the press did not exist and copying by hand was a very laborious process. The great literature of Islam, philosophical and scientific grew out of the Prophet's religious teachings in the few centuries after his death. Other religions have inspired the literature in other countries and history everywhere testifies to the close relationship that exists between the two.

if rightly understood. We have thus tried to see how Religion instead of being antagonistic to Science is only a continuation of the same, and how it throws a flood of light on things which modern Science can not yet reach; how it serves as a sure basis of morality, and how it has inspired Art and Literature. In spite of all the wrong that has been done in the name of religion, it still remains a great beneficient force in the world and it were folly to ignore it, or to talk of relegating it to the "scrapheap." We must take out of it all the good it can give, and try at the same time to reduce the harm it

has done. If we look through history we shall see that religion has brought misery only when the adherents of one religion or sect, believing in its superiority have tried to force it on others; and the best remedy for this is to study all of them. We shall attempt this not in a spirit of fault-finding, but in order to appreciate all that is ennobling in each, not in a comparative but in a synthetic manner. We will take each religion in turn and try to study its essential teachings and in doing so for the sake of convenience we shall divide them into two parts, the theoretical and the practical—the philosophy and the morality.

VIII. Sanatana Dharma--(i)

106. The Eternal Religion, In trying to understand the laws which govern the world, as enunciated in Religion, we shall take Sanatana Dharma—the Eternal Religion first, This religion commonly known as Hinduism is the oldest known, and is said to be "like a river which has shallows where a child may play and depths which the strongest diver cannot fathom.' It is futile to try to summarise its teachings in a few pages, and all that is attempted here is a bare outline, touching questions which generally arise in a mind accustomed to think in terms of modern science. It is intended rouse the curiosity of the reader, by trying to show him how complete is the scheme of things it lays before us, and to goad him on to dive deeper into the original books. Even a little glimpse of truth, that one may thus be able to obtain will amply repay all the trouble, not only in the case of Hindus but of those born in other faiths as well. the same thing would of course be true of other religions as we shall try to show later. It is only by thus trying to understand one's own and each others faiths, that we shall see that they are all different ways of describing the Same Thing, and thus will real religious amity arise.

- 107. All the world an illusion. According to the Sanatana Dharma, the whole manifested creation streams forth from the Unmanifested and is dissolved into it again, at regular periodic intervals. Our portion of the Universe, our Solar system, called Bramhanda—the egg of our creator—is only one amongst myriads, so numerous, that it would be easier to count the grains of sand. Of the Unmanifested no description is possible in words, except that IT IS, and has to be experienced before one can understand anything about IT. It can be reached and when one does so, he knows All. That is Nirvana the highest goal attainable, a condition of intense Being where the ocean merges into the drop. Nirvana is not a state of annihilation as some Western scholars imagine. Manifestation begins when the Unmanifested develops within itself a thin veil of Avidya-Ignorance, which divides it into two, Purusha and Prakriti, Life and form, Energy and Matter. The twain are really one, but appear two while the Ignorance lasts. It is only a limitation, not a fundamental change, and from this point of view, the whole manifested creation is an illusion for one who tears away the veil of Avidya.
- 108. Such a state of affairs is of course difficult to grasp while we are under the spell, but those, who read these statements of Shankara and others, cannot help being struck by their evident. ring of conviction. In Shankara's presence we feel

like a frog at the bottom of a deep well listening to the man on the top describing the glories of the sunshine above. The frog might very reasonably argue that the whole world was most watery and dark, and bright light would be, according to him all irrational. All our knowledge is based on the assumption that space has only three dimensions. "Why not four?" is to us a stupid question and yet it may be true. Those who try to follow the researches into the mystery of Time and Space by modern thinkers, like Kant, Einstein, Hinton, Eddington, Ouspensky,* especially about the possibility of a four dimensional space, will not consider Shankara as foolish and impossible, as the halfeducated B. Sc. is apt to imagine. An acceptance of this point of view will completely change all our values, and demands. I mention it here because a reference to Sanatana Dharma would be incomplete without it. Even if we cannot reach it we may at least learn not to talk disrespectfully of things we cannot comprehend.

109. Creation Triple in Nature. A night-mare is realised as a dream only after the man awakes, but while it lasts, it is intensely real. Hinduism recognises this, and although we find many people immersed in wordly pursuits, talking of the whole thing being an illusion, nowhere are

^{*} Kant—"Critique of Pure reason" "Practical Resson," Einstein—"Relativity," Hinton—"A new Era of thought— "The fourth dimension," Ouspensky—"Tertium Organnum" (Regan),

we asked to consider it as such. All the religious books are full of detailed directions as to how to deal with the situation, while we are still limited by Time and Space which do govern the manifested creation.

So we are told that on crystallising out of the Unmanifested, Purusha develops a three-fold aspect and so does Prakriti. The Life current divides into three streams, Sat, Chit and Anand—terms which are difficult to translate. In the reverse order they correspond to the three qualities "Desire, Knowledge and Activity"—or "Sensation, Intellection and Action." On the form side we have three corresponding properties—"Rajas, Satva and Tamas—Motion, Rhythm, and Inertia. Desire is the cause of motion, Knowledge insures Rhythm and Activity is required to overcome Inertia. This three-fold division (recognised even by modern science) pervades the whole creation.

110. At the head of a world-system stands its Lord—Ishwara—not outside it, but in Whom dwells everything at all times, and the wheel is set going by His dividing Himself into three Great Ones—Shiva the Destroyer, Vishnu the Preserver, and Brahma the Creator. One in essence, but separated only by their functions corresponding to the triple division. The work of creation proceeds by calling into existence Suras and Asuras, that vast

multitude of intelligent Beings of varying power and authority, who guide the whole course of Nature. The Suras or Devas-the shining onessupervise all constructive activities, while the Asuras embody the destructive energies of nature. Though opposed to each other on the surface, both the agencies are equally necessary. The function of the Devas can best be described as spiritualising matter, of the Asuras as materialising the spirit. Matter with its greater limitation is considered lower than the spirit, and hence the Asuras are said to be concerned with the downward path, and the Suras the upward one-sometimes called Involution and Evolution. Man, whose function is to bring out (Satva) harmony between spirit and matter, completes the triad. He is guided in this difficult task by Rishis-men who have trodden the same path in by-gone ages, and have now reached perfection. Thus Suras, men and Asuras each under their respective chiefs, corresponding to the Brahma, Vishnu and Shiva aspects of Ishwara carry on the whole play—as it is called—the Lila of the Lord. What is destruction from one point of view is the highest good looked at from above, and hence the Destroyer is called Shiva, the good or Mahadev. the great Lord, who looks at all the fun from the burning ground.

111. Limitation in seven stages. Although there exist four-faced, five-faced Bramhandas and so

on, in our Solar system this process of limitation is carried out in seven stages, as far as we are concerned, and so we have, according to the Sanatana Dharma, not only the one world we see, but six more "Lokas" or regions, all the seven interpenetrating each other and co-existent. In fact they are not different worlds at all, but are felt as such as consciousness limits itself dimension after dimension. The visible world we sense is felt to be threedimensioned, because we have a three-dimensional consciousness, and the same universe may appear quite different to a horse or a snail. Passage from one world into the other is analagous to focussing a telescope at objects at different distances, and there are seven such principal ranges. The world we see is Bhu-loka, An expansion of consciousness takes us into the next Bhuvarloka, then Suvarloka. Mahaloka, Janaloka, Tapoloka and Satyaloka in successive stages, each one subtler than the one before. There exist it is said seven more ranges from Patala to Atala, all denser than our earth.

112. As Energy can express itself only through matter each of these regions is full of appropriate matter or Tatwas, their "That-ness." Of these, the lowest five are Prithvi in Bhuloka, Âpa in Bhuvarloka, Teja in Suvarloka, Vayu in Mahaloka, and Akasha in Janaloka. This Âpa (water), and Vayu (wind) should not be confounded with water and air in our world. Out of this

matter. Life forms for itself appropriate Koshas envelopes—in which it clothes itself in succession. The innermost of these, with which we are concerned is the Anandmaya kosha, something like an underwear on which we put on the shirt of Vidnyana and then the vest of Mana and the coat of Prana, the Annamava Kosha or the envelope made of food in this world being only the overcoat. Life can function in this visible world of ours only while it has the overcoat on, and death far from being the unknown to be dreaded, is nothing more than taking off the overcoat, and entering the parlour of Bhuvarloka. Passage from the parlour to the office-room of Suvarloka may be called the second death, when the person may take off his coat and set to work. Just as a man does his most important work in his office, and goes out into the parlour and the street, with his coat and over-coat on, only when he wants to confer with others, to realise dues, or to pay debts, according to the Sanatana Dharma, the inner man does exactly the same. Most of us spend our life mainly in these three worlds—Bhu, Bhuva, and Suva; but some do go into their study Vidnyana, and only a few into the innermost shrine—Ananda.

113. The object of the struggle. Who is the inner man and what is the object of all these journeys one may ask. The Vedas explain that as the spirit guided by the Devas descends into matter

it subdivides into a profusion of streams—Jivas, in essence one, but not partaking equally of its three qualities, Sat, Chit and Ananda. According to the degree to which the respective faculties preponderate we have seven great types, and innumerable varieties of each. It is these portions of Ishwara who act in the play, and in doing so put on costumes of matter described above. The whole creation can be described as the searching by the different Jivas of suitable costumes which would enable them to properly express their respective qualities. Just as there are numberless Jivas, an infinite variety of clothes is possible, and all these have to be obtained from one heap, to which all Jivas scramble, and this makes the search troublesome. Unlike our clothes. these Koshas (costumes) are moreover made of living matter with distinctive properties of Satwa. Raias and Tamas, and the Jiva does not find it easy to distinguish between his own qualities and the properties of his clothes and this increases his difficulties still more. At first the only way for him is to try whatever clothes he can get. If they have properties stronger than his own qualities, he forgets the part originally assigned to him, and spoils the play, by acting a part, more in keeping with the clothes than himself.

When all hope of improvement is lost, the clothes are taken away from him and he makes another choice. But the other Jivas, with whom he has contracted debts of "love and hate" "pleasure or pain" in playing his part before, do not forget the debts and find him out again wherever he may go, and demand payment. Often his clothes are all torn off his back and he rushes into his parlour—Bhuvarloka, or office—Suvarloka, only to come out again in another disguise. So goes on the struggle, till one day it dawns upon the Jiva that it is not the clothes that matter so much, as the part he has to play; and that makes a great change in his attitude.

He takes any clothes he can get hold of and concentrates his attention on the substance of his speech, and the emotion he wishes to show, and the better he does it, the more is Ishvara the Master-Play-Wright pleased, until a day comes, when the Lord Himself, undertakes to select, and fashion the clothes most suited to the part, He wants the Jiva to play. The Jiva becomes an Apprentice-Play-wright Himself, and in fullness of time He starts a theatre of His own in another world system, or retires if He so chooses, into the Unknown out of which came the Actors and the clothes alike.

114. All within the law of causation. How quickly a Jiva can thus finish with the play, depends entirely on himself; but while he is at it, he is bound by every little pleasure or pain he gives his brother

actors, and has to take the consequences. There is no favouritism because all the actors are of Royal Blood, and being the sons of the Play-Wright Himself, why should any one rank above another? Perfect justice rules the world and every little action has its result attached to it by an unbreakable thread. All that happens is that one succeeds the other in time. Suffering is not the consequence of an act, but an actual part of it, although it may be experienced later, just as a soldier is sometimes wounded in a battle, but feels the pain only after the excitement has subsided. Wrong doing is like inflicting that wound on oneself. The Jivatma has to carry out all his activities within Law. So long as he does not know the Laws, he is a slave, tossed about by others, but he learns these laws by experience and can then guide his own course. At any stage he is just what he has made himself; he is bound, he is fated to be so, as some people say, but his future is clay in his hands. If the present comes out of the past, the future is the outcome of the present, and both statements are two parts of the law. Nowhere has half knowledge done greater harm than the forgetting of the second half of the law has done to our Motherland.

115. The place of Devas in Nature. One more valuable lesson the Vedas teach us is that this Universe far from being a fortuitous concourse of atoms, is guided at every step. Not a leaf falls to

the ground or a sparrow builds a nest without creating a ripple in the Great Consciousness, and receiving the response, through the host of Intelligent Beings who supervise the creation, and carry out the great will. The Suras or Devas are already mentioned, and there are countless hosts of these, 32 "kotees"—crores, or varieties—whichever way we take it. Each of the five states of matter have their Over-lords.....Kubera for Prithvi, Varuna for Apas. Agni for Tejas, Vayu for Vayu and Indra for Akasha. Each state of matter is again subdivided in the same way, and the Lord of each Tatwa looks after his whole division mainly and helps his Brother Lord in the corresponding sub-division of His Kingdom. So that not a match can be struck. without a representative of Lord Agni being present, even in the twentieth Century, say the Vedas. We "educated" men may laugh if we will, because these appear to us to be mere opinions, but according to Sanatana Dharma they are facts, and are not affected by "our opinions." Nothing happens in Nature without the guidance of these Devas or angels as they are called in other religions, and so they appear all powerful. If we accept this at least as a hypothesis, we shall understand the great dread in which these Agents are held and worshipped, so much so that we often forget the fact that theygreat as they are—are but the Agents of the Divine will and are strictly bound within His Law exactly as human beings are. They stand in the position

of the King's officers, like the Collector, or the Superintendent of Police, and cannot show to more favours, than such officers can in this world. In spite of all this, we how men worship officials in this world. for petty gains, and if other people behave in the same way towards Deva officials, there is nothing surprising in it. If one need not go down on his knees before every Collector, it does not follow that a "magistrate" is all "nonsense," nor is it true to say that the C. I. D. does not exist, because these officials work quietly. It is not a belief in Devas but the frame of mind, which expects favours by flattering officials that has done us great harm, and a little more belief in the inviolable Laws of Ishwara will create a saner attitude, in which it will be possible for us all to co-operate with these great officials and their staff, for the common good of all.

of the Sanâtana Dharma would not be complete without a mention of the Rishis—Perfected human Beings, who have been specially helping mankind since the earliest ages. The Vedas also have their "child humanity" but not one left to itself to babble and stumble along, as best as it might. The "child humanity" had always had its wise Parents, Lawgivers and perhaps, They gave even greater guidance when humanity were "children," in days of yore. Not only have these Law-givers and Sages existed

from times immemorial, but the Vedas say that They exist to-day in 1950 Anno Domini, and if they do not seem to mix in the world, it is only because They can help us better that way. If they are All-wise, presumably They are the best Judges of their methods. They are the repositories of all knowledge, and ever ready to take worthy pupils, and lead them towards self-realisation. India abounds with traditions of such men, and there are hundreds of men even to-day engaged in seeking for them, in different ways, which fall mainly into three classes Dnayna (Knowledge), Bhakti (Devotion) and Karma (Action). The three are not independant, but intertwined like everything else in the world, and each person can choose what suits him.

117. Summary.—Thus we see that according to the Vedas, the whole creation is an illusion in reality, but not one while it lasts. The One unmani—fested divides into two streams—Energy and Matter and each of these in three more, and so on, till we have all the infinite variety of Life and Form. This occurs in seven stages, our world being only one of these and the lowest. Death is only passing a stage higher up; and the whole object is the search by the portion of life—Jivatma for its appropriate garment of matter. All this search is to be carried out strictly within the limits of the Law of causation and under the supervision of officials—the Devas, and the guidance of Rishis—

our Perfected human beings. A little greater belief in the Law, and a saner attitude towards the officials and teachers, will make all the difference. These in short are the teachings of the Sanatana Dharma, and they lay before us a far more complete scheme of Life, than western science can boast of. How far this appears logical and reasonable is for each one to decide but even in these enlightened times, it is the duty of every educated man to try to understand, what has passed off as Eternal Dharma, from prehistoric times, because if such an understanding is followed by an acceptance of the fundamental ideas, it will change all our values in life, and perhaps lead on to better relations between Man and Man, and thus make the world a little happier.

IX. Sanatana Dharma (ii)

118. Duties differ, Four Broad Classes.— Having understood the general theory which colours the whole Sanatana Dharma we will now see what rules for practical life it gives to its followers. As we have already pointed out, Hinduism postulates an unending stream of Jivas flying out as sparks from one flame, and as all these jivas have the three attributes in different proportion we have infinite variety in creation. Moreover, as all these jivas are at different stages of evolution, Sanatana Dharma maintains that it is impossible to lay down one rule of life for all. A cat sees a rat and jumps at it: a tiger in a jungle kills other animals: a savage sees something glittering in another't neck; he takes a stone, kills the other man and takes the tinsel. On the frontier they put a bullet in your head for a similar purpose today. There is the story of the Australian savage who felt hungry and so ate his wife. When a missionary, who felt shocked at it tried to remonstrate with him, he assured him that the wife was very tasty. A child--our own childdoes something and we foolishly beat him for it. Next time he does a similar thing and we ask him "Did you do it?" "No" says he, because he does not want to be beaten. He has no idea of truth and untruth. Now which of these are right and which

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wrong.? If the cat and the tiger do not kill how are they going to live? If the savage did not stone the other man, perhaps he might be dealt with in the same way. The cannibal thought he was paying a great compliment to his wife, however horror-sticken the Padri might have been. If the child told the truth, a beating is all the reward he would get. And so their actions are perfectly natural, each in its own place, and therefore right, but all wrong if done by persons at a higher stage of evolution. The Sermon on the Mount may be and is splendid teaching for those who are nearing God-head, but if the Christian Nations of the West followed it literally, they would be annihilated in three months. The Sanatana Dharma therefore does not prescribe one line of conduct for all, but insists that each shall follow "Swa-Dharma—his own duty," suited to the station of life in which he is born.

Now the situations in life being so varied Hinduism only attempts a broad classification. It divides society into four main categories the varnas—The Shudra, Vaishya, Kshatriya and Brahmanm and lays down general direction for each of these separately.

119. The Duties of labourers. The youngest jivas, who are chiefly moved by desire and who have yet to grow by the gratification of most but not all desires, whose power of initiative is

small, whose reason is poor and undeveloped, whose judgment is untrained and in whose case the self is yet unconscious of a higher destiny. these men can grow best by obeying wiser people. They were called Shudras or labourers in India. and by whatever name they go, they are to be found in every nation. They can rise best by willing service. Obedience, devotion, fidelity is the law of growth at that stage. The Shudra is like a private soldier acting under his captain; if he started arguing every time he had an order, what would become of the Army? His duty—at this stage—is service. That this means no unfairness to the Shudra will be seen from the fact that while Hinduism asks him to obey implicitly, it enjoins on the higher classes, to treat him like a child in the family, to admonish him, if need be, with the utmost gentleness. The duties are mutual.

120. The duties of the capitalists. The soul having learnt this lesson in repeated births, and developed his judgment, next proceeds to learn the use of power by acquiring wealth and worldly possessions. He has to appreciate the value of perfect justice. He must exact from every servant proper service but must pay him proper wages, without which he will soon find that he cannot acquire wealth. He must be frugal, avoid waste and extravagance; refuse to pay more than he should and insist on a just and fair exchange. If he is served

by his labourers, he in turn must serve society, supply to his countrymen what they want at a reasonable profit, and then only will he succeed in his Dharma of a Vaishya to acquire wealth. Having acquired the money he is certainly allowed to spend a portion on his personal pleasures but he must further learn how to spend it properly, with liberality and yet with discrimination, on worthy objects which will further the cause of Society as a whole, and so his own. Thus does he grow. Every nation has and needs this class of men, by whatever name they may go, and Hinduism lays down definite duties and responsibilities for such men.

121. Duties of Warriors and Administrators.

As the man evolves further he grows in aggressiveness, as he ought to. He must now develop courage, along with his combative tendencies. He has to be ready for battle at any time, and as he has to keep his body supple and strong for this purpose, he now has necessarily to forego some of the personal pleasures which he was accustomed to, when he was a Vaishya. To learn the art of war, it is his duty to struggle with wild beasts in the jungles, and Hinduism nowhere enjoins on him the duty of Ahimsa (non-killing). That is a noble ideal, but not yet. Some sentimental pseudo-moralists shrink from that teaching; but if they look round they will see that if all the men in a country became equally sentimental the Nation will perish in a day. The

Dharma of a man at that stage of evolution is therefore to be always ready to shoot and shoot straight, whenever he is called upon to do so. Only, he must not use this power for personal agrandisement or for securing sensual pleasures for himself. He is to kill only to defend the weak from the violent attacks of the strong. He is to shield the helpless from those who would trample them under their feet. In the discharge of this duty he has to face dangers, and throw away his life, when duty demands the sacrifice. Thus does the soul gradually learn the lessons of endurance, fortitude, courage and loyalty. He gladly surrenders his body as the price of these, and the immortal soul rises triumphant ready for a nobler life. That is the typical Kshatriva or warrior class of old as of today, and their duty is quite different from that of the first two classes.

122. Duties of the Teachers. Then comes the last stage. The lessons of each stage have all been learnt by the soul, first as a Shudra, when he learnt obedience to superiors, to which he added justice to equals and inferiors as a Vaishya. As a Kshatriya, he gained courage, and has tested the joy of self-sacrifice in fighting for a just cause; and now it is time that he should impart to the younger souls, all the lessons he has thus imbibed through a series of lives. His duty is now to classify all his previous experiences, analyse them, understand the

sequence of cause and effect, and warn those who come after him. The law of his growth is knowledge and piety. He is now the friend of all creatures. Remembering how foolish he has often been in his previous lives because of ignorance of the laws of life, he is now patient with wrong-doers, "because they know not," and forgiving. Having acquired, both wrongly and rightly, worldly possessions and having had to leave them time-after-time death, he has now realised how transient, they are. He no longer hankers after the goods of the world; but because he teaches others, it is now the duty of the younger members of society to feed him in their own interest, and to give him all the money he needs for his educational activities. If he starves or his school has to be closed down the loss is the Nation's, not his. The goal of his life is liberation Moksha—being free from this seemingly eternal round of birth and death, and while he pursues that ideal, he supports the tottering children round about him, remembering how he, in his younger days, was helped by his Elders. That is the Dharma of a Brahmana, who exists in every nation, whatever he is called

123. Wear the cap that fits you. Sanatana Dharma thus broadly classifies society into four great classes, and lays down—not one—but, different duties for each class. As a man rises in the scale of evolution, he has to assimilate all the lessons

that have gone before. Thus a Brahmana must be as obedient to his superiors as a Shudra, must get money for his educational institutions and spend it as justly as the Vaishya, be as courageous and selfsacrificing as the Kshatriya, and vet something more. Heredity would certainly help not only for biological reasons, but because of the possible training in early childhood in that particular life, but heredity alone cannot make a Brahmana of a child soul, who has vet to learn the first lesson of obedience to superiors. A Brahmana devoid of learning according to Manu is only like a toy elephant. Being a Brahmana is no privilege, no bed of roses, but a heavy responsibility for the Jiva who is yet young in experience. So each man must see for himself what tendencies and qualities he has and wear the "cap" that fits him best.

124. Individual life in four stages. In addition to these four vertical compartments, Hinduism again marks off mankind horizontally into four more compartments thus dividing society into sixteen categories. The first classification was made with reference to the age of the soul: now it is the age of the body. With this difference, the stages, their duties and responsibilities, are similar. In the Brahmachari or student stage the child's duty like that of the Shudra is to obey. As a Grihastha or house-holder he earns money justly like a Vaishya. As a Vānaprastha, he does public work fearlessly

like the Kshatriya, and as a Sanyāsi he teaches, seeking liberation for himself. A Shudra will pass these four stages, beginning at his lower level. The Brahmana starts higher and ends higher still. Thus will society rise from a Shudra child to the glory of a Brāhmana Sanyasi, in sixteen different stages, following the Dharma or duty of each stage and thus rise continuously as it were in a spiral. That is the fundamental teaching of Varna Ashrama Dharma, enunciated in Hinduism, but so often forgotten or even misunderstood by the Hindus, and hence the down-fall of the Nation. Other nations may not have such a clear classification, but they have men who truly follow the Dharma of each stage and hence their prosperity.

125. Five sacrifices. Having thus given a broad outline, Hinduism lays down that each person must perform Pancha-maha-Yadnyas—the great five sacrifices of course suitably interpreted. Like the Utilitarians it lays down that we owe all our happiness to all those who carry on God's Government, to all those who have gone before us, and to those amongst whom we live to-day, and that each individual must daily try to discharge this great debt to the best of his ability. First the Veda-yadnya, sacrifice to the Vedas or to Brāhmanas the repositaries of those. This means study for all, accompanied by teaching for the higher classes. To cultivate his knowledge and to share it with others

is a duty which man owes to Society. One who lives without daily study becomes frivolous and useless, and so every man must devote a portion of time daily to studying the Vedas. the store-house of all wisdom. Then comes the Deva-Yadnyasacrifice to the Devas: those shining ones, who form a separate kingdom of nature as already explained, and who guide all the activities of nature in this world. The third secrifice is for the Pitries the Ancestors from the Rishis and Seers of old. down to our immediate ancestors and parents, whose labours have bequeathed to us the accumulated stores of wealth, learning and civilization. Then follows the sacrifice to the Sub-human kingdom of nature including the lower orders in the invisible worlds, stray animals, birds and insects. Lastly comes the sacrifice to men, the feeding of guests, giving of food to the homeless and the student and generally helping the needy. In this a man is taught his duty to his brother man and learns kindness, tenderness and compassion. Every day a man has to attend to all these five debts before he sits down for his own meal.

126. If only we live it, Hinduism contains very detailed directions on all sorts of subjects from bodily cleanliness, as in the old days it was all part of religion, but we have sketched above the fundamental rules it has laid down for the practical guidance of Hindus. It is possible for a man to

follow these rules which, it will be noticed are morals, and yet something more, and if he does so in the right spirit he will succeed in life and be a useful member of society. He may not care for the philosophy, but it is the theory behind, which colours the whole scheme, and if a man did not believe in life after death, many of the practices would look ridiculous. Hence the necessity of understanding, If people in India who profess the Sanatana Dharma, really appreciate their wonderful heritage, and mould their life accordingly, they have the assurance that "Where Dharma exists—where people do their duty, victory must ensue."

X Islam (i.)

127. The youngest Religion with the oldest. It is in the fitness of things that from Hinduism we should pass on to a consideration of Islam which claim one fourth of the population of India as its adherents. It is curious that, of the two religions which matter most in India, if one is the oldest in the world, the other one preached by the Prophet of Arabia is the latest born. If Hinduism stretches into the dim mythological past, the rise of Islam is a matter of history. Ancient and covered which shells—as the former is, it is far from being feeble; but the new dispensation even with incrustations (to which all religions seem peculiarly prone) is certainly the more virile of the two. This reminds us of the skilful gardener who grafts a young bud on to an old and well-established tree and gets results far better than either of the trees can give alone, Who knows that the Great Gardener is not working towards a similar end? In this drawing together the twain—the oldest and newest faiths in the world, one cannot help seeing some Plan at work; and shall we spoil it all by blindly refusing to look at it? Perhaps all the troubles between Hindus and Moslems in India are analogous

Note: This review of Islam waswritten in 1931 and holds good even in 1950, inspite of the recent happenings. G. N. G.

prophet but it is also the natural religion of man to the bickerings we see between the older and younger generations in every family, and a little more undertanding is all that is required.

128. Does not preach aggressiveness. Islam signifies, not aggression as is commonly supposed, but peace, greeting, safety and salvation. 1 A Muslim according to the Holy Ouran is he who has made peace with God and man, with the Creator as well as His creatures. Peace with God implies complete submission to Him, who is the source of all purity and goodness, and peace with man enjoins on the followers the duty of doing good to their fellowmen.² Not a passive acquiescence but an active working out of the will of the Almighty—that is the keynote of Islam, and that is the true religion according to the Prophet According to the Quran, Islam was the religion of all the prophets, and it is particularly mentioned as the religion of Abraham several times 3 "Abraham was not a Jew nor a Christian but he was an upright man, a Muslim and he was not one of the polythiests." Not only is Islam the religion of every

Abbreviations used-

S. I.—Spirit of Islam by Syed Ameer Ali (Christophers. Revised Edition).

H. Q.—The Holy Quran by Maulavi Mahomed Ali—Islam review office Working England (1920).

⁽¹⁾ S. I. Page 137. (2) H. Q. page vi. (3) H. Q. foot-note 400, pages 145, Also H. Q.—III. 66 page 163.

"the nature made by Allah in which He has made men.\(^1\) A saying of the Prophet reported by Afu Hurairah brings this out still better, "Every child that is born conforms to the true religion, then his parents make of him, a Jew or a Christian or a Magian,''\(^2\) 'Yea! whoever submits himself entirely to Allah and is the doer of good to others, has his reward from the Lord, there is no fear for him, nor shall he grieve.''\(^3\) That is true Islam, and who can quarrel with it? Have not Shri Krishna and Christ taught exactly the same thing?

from preaching intolerance to other faiths, the Quran specifically teaches tolerance. "We revealed the Torah (to the Jews)." "We sent...Jesus, verifying what was before him of the Torah." And "now we have revealed to you the Book with the truth verifying what is before it...for every one of you, did we appoint a law and a way, and if Allah had pleased He would have made you (all) a single people, but (He hath thought fit to give you different laws) that He might try in what He gave you. Therefore strive with one another to hasten virtuous deeds." The Quran says in distinct terms. "There is no compulsion in religion." Also "invite men into the

^{1.} H. Q. - XXX: 20, page 794. 2. H. Q. f. n. 1937, page 794.

^{3.} H. Q.—II; 112 page 55. 4. H. Q.—V; 44, 46 pages 264, 266.

^{5.} H. Q.—V: 48 page 266. 6. H. Q.—II. 256 page 120.

way of the Lord by wisdom and mild exhortation: and dispute with them in the most condescending manner: for the Lord well knoweth those who are rightly directed. Let there be no violence in religion. If they embrace Islam they are surely directed: but if they turn their backs, verily unto thee belongeth preaching only." Mahomed was against the worship of idols, and yet he says "Revile not the idols.....lest they (who worship them) maliciously revile God without knowledge". Again "Surely those who believe and those who are Jews and Sabeans and the Christians and the Magians and those who associate others with Allah. Surely Allah will decide between them on the day of resurrection." 2 Difference in religion does not call for punishment in this life.

130. Not only did the Prophet preach tolerance but he also practised it in the plenitude of his power, when he could afford to be intolerant. All his wars were fought in self-defence. In the chapter Al-Hajj, the Quran says "Permission (to fight) is given to those upon whom war is made, because they are oppressed and surely Allah is well able to assist them." Again says the Quran "Fight in the way of Allah with those who fight with you, and do not exceed the limits: surely Allah is Forgiving, Merciful...... And fight with them until

Sale's Quran page 206.
 H. Q. XXII. 17, f. a. 1680 P. 666.
 H. Q. XXII—39 p. 671.

there is no persecution, and religion should be only for Allah." "The Prophet's charter to the monks of the monastery of St. Catherine, has been justly designated as one of the noblest monuments of tolerance.....By it He secured to the Christians privileges and immunities, which they did not possess even under sovereigns of their own creed: and declared that any Muslim violating and abusing what was therein ordered, should be regarded as a violator of God's testament, a transgressor of His commandments, and a slighter of His faith.2 only did the Prophet preach and practise tolerance to all faiths, but there are verses in the Quran which place all faiths known to the listeners of the Quran in Arabia on a par. "Surely those who believe (Muslims), and those who are Jews and the Christians and the Sabeans, whoever believe in Allah and the last day and do good they shall have their reward from their Lord and there is no fear for them, nor shall they grieve."3 This verse strikes at the root of the idea of a favoured nation whose members alone are entitled to salvation. The Ouran only requires faith in God, doing good, and having a belief in the last day, the hereafter and implies responsibility for actions. If these high principles preached and practised by the Prophet were or are sometimes ignored by his followers the verdict of the Quran is quite clear on the point.

¹ H, Q. II 190-193 p. 86-88,

² S. I. page 84.

³ H. Q, II-62 and F. N. 104-page 37,

That such followers would read their own scriptures a little more carefully, is all we can wish.

131. One Allah. A belief in One God,' Allah is the cardinal principle of Islam. 'Fatihah, which forms the opening verse of the Quran and is repeated by Muslims during the five daily prayers, teaches belief in one God the Master of the Universe whom they adore "Thee do we worship and from Thee do we seek help. Show us the Right Path." The surah called (Ihlas) emphasises the same doctrine.

"Say, He Allah is one

There is scarcely a chapter in the Quran but contains some fervid reference to the power, mercy and unity of God.

"Your God is one God! There is no God but He, He is the "Beneficient, the Merciful."²

"Allah is He besides whom there is no god, the Everliving, the Self-subsisting, by whom all subsist; Slumber does not overtake Him, nor sleep; whatever is in the heavens and whatever is in the earth is His;.....and the preservation of them both

[&]quot;Allah is He on whom all depend.

[&]quot;He begets not, nor is He begotten

[&]quot;And none is like Him." 1

^{1.} H. Q. CXII. 1-4 p. 1235.

^{2.} H. Q. II-163 page 73.

tries him not." "There is no beast on earth" says the Quran "nor bird which flieth with its wings, but the same is a people like unto you—unto the Lord shall they return" "Everything is perishable but He; His is the judgment and to Him you shall be brought back." Thus the Allah of Islam is the Ultimate One source from whom springs the whole creation, and in whom it merges again; and this is just what all the older religions have said.

132. Idea extended by Sufis. This one Great God is not some external tyrant as some suppose, but says the Quran "We are nearer to him (man) than his life-vein."4 Navy the followers of Islam go further in asserting Ana'-ul-Hagq "I am the Truth" thus only repeating in other words the highest conception of the Vedantist "That Thou art." It is only fair to mention that this latter view is not accepted by all Muslims. The Sufi Saints have always preached it; and when it is remembered that these Sufis derived their inspiration from Ali, the Son-in-law, and one of the dearest disciples of Mohamed, it is certainly not unimaginable that the Prophet himself revealed this great truth to him. Did he not say once "I received from the messenger of God, two kinds of knowledge; one of these I taught, and if I had taught

^{1.} H. Q. 11-255 page 119.

^{2,} S. I. page 158,

^{3.} H. Q. XXVIII -88 page 773.

^{4.} H, Q, L,-16 page 997,

them the other, it would have broken their—throats......¹ At any rate this Truth is freely proclaimed by the Sufis within the pale of Islam; and it shows that the youngest revelation is not a whit behind the oldest. This fact further brings out very clearly the common source of all Prophets, for does not the Quran itself say "we make no distinction between any of them.'.²

133, Islam also believes In Angels. Although the whole universe is created by God, in the manifested condition He Himself has to perform various functions, and in the Quran itself He is therefore addressed in at least 99 different ways, each having a significant meaning. Thus he is described in one place as the Creator, in another as the Sustainer, and still in another as the Destroyer. He is the one actor, but for the proper discharge of each function He has created instruments, and entrusted to them different offices. Round the throne of God,—the Malik (King) throng these great officers—Malaikah the Angels, corresponding to the Devas of Hinduism; and mighty as they are, they carry out but His will. The existence of such angels is unequivocally referred to in the Quran, and men are told to respect them as their principal helpers on the path of virtue. The Prophet himself received his revelations through one of these angels—Jibrail—

^{1.} Sayings of Mohamed.

^{2.} H. Q.- II; 128-p. 64.

the great messenger.¹ Then there are the recording angels: "Most surely there are keepers over you, honorable recorders: They know what you, do," ²: and others that were sent to assist the Prophet in his wars on various occasions. Satan, originally known as Azazil, the great tempter of mankind was himself one of these angels, fallen from heaven.

134. Perfect Justice of God. One of the attributes of God is Perfect Justice: and Islam also preaches that every man gets exactly what he deserves, and better, as God is all merciful too. "Whatever benefit comes to you (O man) it is from Allah, and whatever misfortune befalls you, it is from yourself."3 "And most certainly they shall carry their own burdens."4 "If one weighed down by his burden should cry for (another to carry) his burden, not ought of it shall be carried, even though he be near of kin. You warn (them...that) whoever purifies himself, he purifies himself only."5 "Verily these your deeds will be brought back to you, as if you yourself were the creator of your own punishment."6 That every action brings its re-action, or the relation between "cause and effect" in everything that a man does or that happens to

^{1.} H. Q. XIX: 64-155 p. 619.

^{2.} H. Q. LXXXII-10-12-page 1169

^{3.} H. Q. IV-79-page 223. 4. H. Q. XXXIV-12-p. 777.

^{5.} H. Q. XXXV-18-p. 850. 6. Sayings of Mohemed.

him, is as in Hinduism a cardinal doctrine of Islam. The only difference is that according to the former man has to return to this world, his original field of action, in order to repay and receive payment of his karmic debts, whereas in Islam he is said to get his rewards and punishments, beyond the grave. Muslims are enjoined to be "sure of the hereafter" and a belief in life after death, not as a new life, but as a continuance of this very life, is a fundamental article of Moslim faith. It is there that every person will have to render an account of his or her actions, and the happiness or misery of individuals in that life will depend on the manner in which they have performed the behests of their Creator. As long as a man "reaps" exactly as he "sows" where he does the reaping, is a matter of detail, and does not affect the main question of man's responsibility for his own actions. God, the Power behind enforcing the strictest justice. These are the surest foundation for all Ethics, which all religions give, and which a mere system of morality entirely lacks.

135. Islam emphasises this in no uncertain terms, and to a casual reader of the Quran passages describing the inevitability of Divine justice may appear even lurid. But if we remind ourselves of the state of society in Arabia, where the Prophet lived and worked, we shall see that the language is

^{1.} H. Q. II-4. p. 13

none too strong, and judged by results, very effective indeed. For a proper understanding of the Ouran and specially such of its verses as are lurid it is necessary to keep in mind the following verse. "He it is who revealed the Book to you: Some of its verses are decisive. They are the basis of the Book, and others are allegorical; then as for those in whose hearts there is perversity, they follow the part of it which is allegorical seeking to mislead and seeking to give it their own interpretation; but none knows its interpretion except Allah and those who are firmly rooted in knowledge; they say we believe in it, it is all from our Lord; and none do mind except those having understanding." 1. To imbibe the true spirit of the Quran we are required to exercise the understanding and probe deep. "Those having understanding" can also be rendered "those having hearts." For catching the true spirit it is also necessary that the heart side of the student should have been developed. Another striking feature about the teachings of Islam is that contrary to. the common belief of the orthodox Muslims the Quran lays no limits to progress of knowledge concerning God which we may call Brahmavidya. or by any other name. Says the Quran "And were every tree that is in the Earth (made into) pens and the Sea (to supply it with ink), with seven more Seas to increase it, the words of Allah

¹ H. Q. III-6 page 141.

would not come to an end; surely Allah is Mighty and Wise. "1 According to Ibnul Arabai a commentator of the Quran "words of God" mean "the true nature of existing things and their manifestation" which may be freely rendered, "Nature of Existence (Life) and its Expression. "Acquire knowledge."

136. The personality of the Prophet. Even a very short review of Islam, as this is, would not be complete without a mention of the life led by the Prophet himself......a life so simple and yet so heroic. Born in difficult times, amongst a people who were sunk in superstition, who "disregarded every feeling of humanity and the duties of hospitality and neighbourliness. and knew no law but that of the strong. He by the force of His character, touched the hearts of even such men so that "tears ran down their beards:" and led them to good ways. Even before he took preaching he was known for his piety and as the "trustworthy"—Al-amin; and when he rose to be ruler of Arabia He retained the same qualities. He never struck any one in his life. "Ten years" said Annas his servant. "was I about the Prophet; and he never said so much as "uff to me.' His conduct towards his personal enemies was marked by a noble clemency and forbearance. It is told of Him that when he

¹ H. Q. XXXI-27-page 805.

walked in the streets children ran out from the doors, and clung to His knees and hands. He visited the sick and would stop in the streets listening to the sorrows of the humblest. It is said that once while the Prophet was busy conversing with eminent men, a blind man came and interrupted him seeking to be taught. The Prophet frowned away his face from him. Shortly thereafter came a reprimand in the shape of a verse of the Quran disapproving of this act. That this verse and all other verses correcting him were recited as faithfully as verses approving his works, shows a rare sense of self examination and courage.

He was moreover extremely simple in his habits. He milked his own goats, and dates and water frequently formed his only nourishment. He mended his own shoes, and patched up his clothes with his own hands, even when towards the close of His life, multitudes around Him bowed down to Him as Prophet. Though unlettered he was profoundly learned in the school of nature and one of his savings that "the ink of the scholar is more precious than the blood of the martyr" will go down to history as worthy of the greatest scholar. Such was the Man, the personality of the Prophet, who inspired thousands in His life-time and millions later and effected a wonderful transformation in their lives. It explains the charm His name has over His followers even to-day.

Xl Islam (ii)*

Duties to God and duties to Man

137. Having tried to understand the general background of thought in Islam we shall now see what rules of practical life it lays down for its adherents. Firmly beliveing in God it naturally enjoins on its followers to do their duty towards God: but, at the same time Islam is equally emphatic about their duties to the fellowmen. the Quran, "It is not righteousness that you turn your faces towards the East and the West but righteousness is this that one should believe in Allah and the Last Day and the Angels, and the book and the Prophets, and give away wealth out of love for Him to the near of kin and the orphans, and the needy and the wayfarer and the beggars, and for the captives, and keep up prayer and pay the poor rate."33 This is the keynote of practical Islam, where Zakat, or the poor-rate is as important as Salat or prayer. "So woe to the praying ones; who do good to be seen and withold alms."34 If you are asked to pray, it is not because God needs it. God is, over and over again,

^{*} I must. here, acknowledge my indebtedness to "Holy Quran's by Mohamed Ali, on which I have drawn very freely in this chapter's (G. N. G.)

^{1.} H Q. II. 177. p. 77 2. H. Q. CVII p. 1228.

stated to be Ghani, i. e. Self-sufficient, above any need of the worlds. If the whole world is engaged in praying to Him, it does not add one whit to His glory and if the whole world disbelieves in Him and is ungrateful to Him, it does not detract from His dignity in the least. The duties to God are only for man's moral advancement and spiritual betterment, and consist of Salat, or prayer, fasting and pilgrimage. Zakat or paying the poor rate, is the Muslim's principle duty towards men.

138. Man. in Islam, is interpreted as the whole of man-kind, and there are no class distinctions among Muslims. "The Islam of Mohamed reccognises no caste of priesthood, allows no monopoly of spiritual knowledge of special holiness to intervene between man and his God. Each soul rises to its Creator without the intervention of the priest or hierophant. No sacrifice invented by vested interests, is needed to bring the anxious heart nearer to its comforter. Each human being is his own priest; in the Islam of Mohamed no one man is higher than other. "1 Says the Quran. "O. you men surely we have created you of a male and a female and made you tribes and families that you may know each other; surely the most honourable of you with Allah is the one among you most careful of his duty."2 In this doctrine Islam lays the foundation of a vast brotherhood,

^{1.} S. I. p 165

^{2.} H. Q. XLIX-13 p. 903,

in which all the members are expected to treat each other as members of the same family. The wealthy and the poor are all the same in the eyes of God, and have equal rights in Society. Not only men who submit and the women who submit....the truthful men and the truthful women, the patient men and the patient women, the almsgiving men and the alms-giving women... (for all these) Allah has prepared forgiveness and a mighty reward. 1 Not only were the rights of women recognised in theory by the Prophet, but He laid down the law that "women shall have a portion of what the parents and the near relatives leave, whether there is little or much of it, a stated portion,"2 and He carried out this reform amongst Arads, who used to say "None shall inherit but he who smites with the spear." A Muslim marriage even today is not complete without a settlement in favour of the wife by the husband. Mohamed also laid great stress on—"the setting free of slaves." Even prisoners of war were to be set free on the termination of war3. Thus was "man" interpreted by the Prophet.

139. Prayer in Islam. Taking the daily duties in order, first comes Salat—or prayer; and this is obligatory upon every Muslim, male or

^{1.} H Q. XXXIII-35 p. 823

^{2.} H. Q. XC- 13 p. 1892.

^{1.} H. Q. XLVII. 4-p. 975.

female, who has attained the age of discretion. It is said five times a day as follows:—

- (1) The morning prayer after dawn and before sunrise.
- (2) The early afternoon prayer.
- (3) The late afternoon prayer.
- (4) The sunset prayer.
- (5) The early night prayer.

Besides these there are two optional ones at breakfast time and at midnight. Before saying prayers it is necessary to wash those parts of the body which are generally exposed. The service consists of two parts one (fard) to be said in congregation, preferably in a mosque and the second (sunnat) to be said alone. Islam has no special places sacred to God where only prayers should be offered; and a true Muslim will offer his orisons at any place where he may happen to be at the appointed hour; only, he will face the holy Ka'aba. A remembrance, even a humble appeal whispered in the recesses of the heart is enough to bring down the grace of the Lord, to cleanse it from impurity and strengthen it for the battle of life. It is further laid down that prayer without the presence of the heart, devotion without understanding is useless and brings no blessings. With a Muslim, his prayer is his spiritual diet of which he partakes five times a day, and millions of the Prophet's followers regard it as such, and regularly carry out the behest of the Quran in this behalf day after day. Therein lies the source of their virility.

140. Fasting in Islam. Fasting is a great institution in Islam meant for the improvement of the moral and spiritual condition of man. "O you who believe, fasting is prescribed for you, as it was prescribed for those before you, so that you may guard against evil." The object is that man may learn how he can shun evil and hence, fasting in Islam does not mean, simply, abstaining from food, but from every kind of evil. All Muslims are asked to fast during thirty days of Ramzan, "the month in which the Ouran was revealed." Apart from the good effects on health, abstaining from food by daylight for a whole month, in obedience to a divine injunction not only gives the Muslims the very useful lesson of getting accustomed to hardships, but helps him to gain a better control over his mind. It is one of the finest means known of "learning how to restrain the passions and to direct the overflow of the animal spirits into a healthy channel," Useless and unnecessary mortification of the flesh is discountenanced, nay condemned, and so if it is prescribed for the able-bodied and the strong, for the weakly, the traveller, the student, the soldier, and women in their ailments it is disallowed. This great lesson in the subjugation of man's lower

^{1.} H. Q. II-183, page 81.

nature is considered one of the four main principles of Islam universally followed to this day.

- 141, Pilgrimage in Islam. The true Muslim's third duty towards God is the undertaking of Haji or pilgrimage to Mecca. This is incumbent on every follower of the Prophet at least once in his life. The main pilgrimage is performed in a particular month when the pilgrim must reach Mecca before the seventh of the month. "Of the principle requirements of the pilgrimage, the first or Iharam represents the severence of all worldly connections. All those costly and fashionable dresses are cast off and the pilgrim has only two seamless wrappers to cover himself, and thus he shows that in his love for his Master he is ready to cast off all lower connections. All men and women there stand on a plane of equality, all wearing the simple dress and living in the same simple conditions. All distinctions of rank and colour, of wealth and nationality disappear there, and the King is indistinguishable from the peasant. The whole humanity assumes one aspect, one attitude, before its Master. It is in this atmosphere that they go round the Ka'aba seven times, and perform various other time-honoured ceremonies. The annual gathering thus presents a truly ennobling sight of practical brotherhood.
- 142. Mutual help in Islam. The last, but not the least, comes Zakat, the poor rate, the duty

towards man. "By the laws of Islam every individual is bound to contribute a certain part of his substance towards the help and assistance of his poorer neighbours. The portion is usually one part of forty or two-and-half percent, on the value of all goods, chattels, mercantile business etc. But alms are due only when property exceeds a certain value, and has been in the possession of the person for one whole year; nor are any due from cattle employed in agriculture, or in the carrying of burdens.¹ And this charity is to be given as unto the Lord. "And whatever alms you give, or whatever vow you vow. surely Allah knows it.If you give openly it is well, and if you hide it and give it to the poor, it is better for you.....Allah is aware of what you do.....Whatever good thing you spend it is to your own good and you do not spend but to seek Allah's pleasure." These alms are to be distributed among the poor and the needy, that is, those who may be able to earn their livelihood, but lack the means, as implements etc. A person may be able to support himself but if he is in debt, it may be paid off from the Zakat funds, Then money may be spent on slaves and captives and prisoners of war who wish to buy their freedom, but have not the means of doing so. A traveller, though in well-to-do circumstances, may sometimes stand in need of help in a strange place, or country and so the wayfarer too, has a claim on public charity. All

^{1.} S. I. p. 170.

^{2.} H. Q. II-270-772 p. 128.

the Zakat, it should be remembered, is to be collected and disbursed as a public fund; and not as each individual likes.

143. Usury forbidden in Islam. Islam not. only fosters charity but forbids usury by which the rich get richer, by reducing the poor to still greater poverty. Usury promotes habits of idleness, and by giving facilities for borrowing encourages extravagance and profligacy; and so says the Ouran. "Those who swallow down usury cannot arise except, as one whom the Devil has prostrated by his touch does rise." So a man may lend money to others in need and take back the capital, but no interest. All the charities, moreover, are to be given in the right spirit, "Kind speech and forgiveness is better than charity followed by injury." In. a sermon the Prophet is said to have further explained it in this manner. "Every good act is charity. An exortation addressed to your fellowmen to do virtuous deeds is equal to almsgiving. Putting a wanderer in the right path is charity; assisting the blind is charity: removing stones, thorns and other obstructions from the road is charity; giving water to the thirsty is charity." That is the charity prescribed by the Prophet of Islam.

144. The Secret of Vitality of Islam. Thus we have seen that Islam enjoins on all its followers

^{1,} H. Q. 2 II-275 p. 130.

^{2.} H. C. II-263 p. 127.

duties towards God and Man. It teaches practical brotherhood in which women had the same rights as men. Withdrawing the mind at least five times a day from all worldly avocations, and turning it inwards, brings a man's consciousness into contact with the reservoir of spiritual force, and is in itself a great lesson. Fasting shows him how to sublimate his lower desires, and in the necessary hardships of a pilgrimage he learns to surrender himself to the will of God. Charity is incumbent upon a true Muslim and in stopping "interest" the Prophet at one stroke cut at the root of all our present trouble between capital and labour. The moral appeal that our present day utilitarians want is all there; and yet by itself it could never have influenced the conduct of millions of human beings as Islam has no doubt done. If Muslims to-day are more virile than others, I have no doubt in my mind that it is due to their prayer, and the practical brotherhood that is practised amongst them to-day. That is "True religion," as defined in the Quran itself, and if specially in India, we kept this in mind and tried to "excel each other in good deeds," we shall no doubt make a heaven of this Earth.

XII. Sikhism*

145. The noblest attempt at Hindu Muslim Unity. After Hinduism and Islam, our thought naturally goes to the Sikhs not only because they are the next important community in India, but because Guru Nanak's was the noblest attempt ever made at unifying the two great faiths. The Muslim had come into India: and some of them, often unmindful of the behests of the Ouran and the wonderful example of the Prophet, had been showing signs of intolerence, while the Hindus were becoming too formal. Like all reformers Guru Nanak wanted both of them to go to the fundamentals of their respective religions which taught Love to God and love to man, as the children of one God. was on this common platform that he tried to draw together the warring elements.

146. There is No Hindu and No Muslim When Guru Nanak gave up the worldly life, it is said that he remained silent for one day and the next day he shouted with joy "There is no Hindu and no Turk." Soon after he was sent for by the Nawab he was serving a few days before. Nanak was late and so the Nawab got angry. Nanak explained that he was then a servant of God.

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^{*} The student is referred to The Sikh Religion by Macauliffe (Oxford).

"Do you believe in one God or many gods?" asked the Nawab "Only in one" replied Nanak. "Since you believe in One God, and I too believe in One God, your God must be the same as mine: so then if you are a firm believer, come with me to the mosque and offer prayers with us," retorted the Nawab. Nanak consented, to the great horror of all the Hindus round about, who thought he was going to embrace Islam. The Nawab and Nanak proceeded to the mosque. When the Kazi began to repeat the prayer, the Nawab and his party began to go through the usual bowing ceremony, but Nanak stood silently still. The Nawab got indignant and after prayer asked Nanak to explain his conduct. "You put your face to the earth" Nanak observed: "while your mind was running wild in the skies. You were thinking of getting horses from Kandhahar, not offering prayers: while the Kazi, sir, was thinking of his mare which foaled only the other day. What is the use of offering prayers with those who go through the customary tows, and repeat the words like a parrot?" The Nawab admitted the truth and was amazed.

147. It is well known how Nanak used to dress in a strange motley of Hindu and Musalman clothes, and how he visited Hardwar and Benares the sacred places of the Hindus, as well as Mecca, to which place he journeyed all the way like a devout Muslim and was always accompanied by

two disciples Mardana and Bala-a Muslim and Hindu, This strange singing Fakir endeared himself to all the people he met, and the only men who did not like him, whether at Hardwar or Mecca, were the orthodox priests. On the whole he was generally beloved during his life-time, and when he died Hindus and Muslims quarrelled as to whether he should be burnt or buried, It is said that when the sheet over the body was removed next morning there was found nothing beneath it. The sheet was divided: half of it was buried and the other half burnt. This was the founder of Sikhism, Guru Nanak, the Great Hindu reformer, born with a mission of uniting Hinduism and Islam, in a common bond of universal brotherhood.

148. Nanak a Courageous Reformer. We have already mentioned that Guru Nanak was a great Hindu reformer. Incrustations had been growing on the ancient faith for a long time. As we have seen before, religions are based upon certain inner truths; but as these great truths can not be verified by every man at the present stage of evolution, each man begins to interpret them as it suits him best. As the various rules and ceremonies are followed without a clear understanding of the reason underlying them, we begin to fix our attention more and more on the means and gradually conjure them up into full-fledged ends in themselves. Various practices settle down into hard and fast

rules; and public opinion crystallizes round them. Mental slavery abounds in this world to such an extent that once a million people decide that a particular thing is right, very few dare go against it. That is where the courageous reformer comes in. He feels convinced that the people are growing a shell which confines Life, and so he breaks the shell, but during the process he has to suffer. He attacks it undauntedly and often succeeds. Such a man was Guru Nanak and these men are born not made.

149. Nanak as a child. Nanak was born in a family of good but common people like an eagle in a nest of sparrow: and the sparrows did not understand the eagle and could not make out what manner of creature he was. Quiet, reserved. silent, wandering away to meditate when other boys would be at play—what a strange child was this, who would not learn and would not play as other boys did: who when he went to his teacher wanted to know the mystic meaning of the letters. and angered the Pandit by asking questions which the Pandit, good man as he was, could not answer. Always coming athwart his surroundings, because he must know what was within, he could not be satisfied with what was without. There is nothing more troublesome to the commonplace man woman than to be pressed with questions as to realities, when he finds himself quite comfortable. on the safe cushion of formulae. So Nanak in his childhood was a great trial to his father. They thought he must be mad. He was found sitting for hours meditating and taking no food, perhaps he had fever They brought a doctor to see him. Nanak asked the doctor whether he would cure the disease of the soul. What kind of patients was that who greeted his physician in that manner? That was Nanak the child, always doing the most unexpected, asking the most inconvenient questions, and yet so gentle and good.

150. The way he behaved at the time of his thread ceremony was characteristic of his later life. Nanak's father being an orthodox Hindu naturally made preparations for investing his son with the sacred thread, when he became nine years old. All the members and relations of the family, and all the neighbours and friends were invited. When the preliminary rites had been duly performed and the family priest Hardayal proceeded to put the sacred thread on Nanak's neck, Nanak turned round and inquired: "Tell me Panditjee, of what use is this thread? What are the duties of the man who is invested with it? Why is it necessary to put it on?"

"No body can perform sacrificial ceremonies without putting it on" said the Purohit, who was merely a village Pandit and did not know the secret

signification of the sacred thread. "This thread purifies the wearer and entitles him to attend and perform all ceremonies."

"If a man who has put on the sacred thread" said Nanak "does not change his ways, and leads an impure life, does this thread purify him and help him in any way in the end? Does not he reap the fruit of his actions?"

"I do not know" replied the Priest "but it is ordained in the shastras and we must follow our forefathers." On hearing this the young boy gave utterance to the following:—

"Make mercy thy cotton, contentment thy thread, continence its knot, truth its twist.

That would make a Janau for the soul: if thou have it Brahmana then put it on me,"

"You have spoken well said the priest "but look at all the expense and trouble your father has been put to: see all these friends and relations: they will all be disappointed if you won't put this on." "I am truly sorry that I cannot oblige you" said Nanak, "I can not put it on, and I will advise you also to think more about the essence of things than the form. Only by true conviction one gains respect, and by praising God and living truth fully man reaches perfection." At last his mother

entreated him for her sake not to disappoint her. Then Nanak simply said: "Mother, I obey." He took the thread and put it on. The story ought to interest our would-be reformers. The lesson having been taught Nanak did not make a fetish of not putting on the thread either. If it did no good, it also did no harm, and when he found that by putting it on, he would make his mother happy, he saw in it a valied reason for obeying. That is the spirit in which great men act even at the age of nine.

151. Nanak—The Teacher. Guru Nanak was never a man of the world, and he left it off completely at an early age. Accompanied by disciples he took to a wandering life, and went from place to place expounding the good law, that all ceremonies and worship without Love for God were of no avail. The Varnas which marked the division of labour in the old days had fossilised into a hard caste, dependent on birth, where people remembered only their privileges but not the responsibilities. Nanak taught that in the eyes of God all were equal. He recognised no caste and his disciples, Sikhs, did the same, Whether they had caste or not, they were distinguished in the company of the holy by their righteous conduct. He pointed out to all men and women, irrespective of caste and even religion the one direct way to God through Love, and taught them that a simple repetition of His name with devotion brought them nearer to Him than all their elaborate rituals. Of course the background of all Nanak's thought was essentially as in Hinduism. He believed in the Only One, indivisible, self-existent, all-prevading, adorable God. He held that all men were really immortal, and that every man was responsible for his own actions, and all the other Truths that a Hindu admits. He was impatient only with the cobwebs that had grown round these great truths and so wherever he went he preached against senseless imitation and against hypocricy in general.

152. Another great reform he carried out was the use of the vernacular for religious purposes. The Pandits and Brahmanas communicated their instruction in Sanskrit, the language of the Gods. The Sikh Gurus thought it would be of more general advantage to present their message in the dialect of their age. When Guru Amardas was asked the reason for this, he replied: "Well-water can irrigate the adjacent land, but rain-water the whole world. On this account the Guru has composed his hymns in the language of the people, and enshrined them in Gurumukhi characters, so that men and women of all castes and classes may read and understand them. In all these respects, be it noted. Nanak's work was part of a great movement that was carried out in other parts of India, by the Maharashtra saints like Namdeo and Tukaram, who are mentioned in the Sikh scriptures. In fact a student can see that this blowing away of ashes that had covered the religions of the world was really a world-movement. But that is another story.

153. Sikhs turn Militant. This noble work begun by Guru Nanak was steadily carried on by his successors. Guru Angad gathered together many of the songs and teachings of his predecessor, and began the compilation of the Sikh Scriptures. Guru Amardas met the Musalman Emperor Abkar in conference showing how the spirit of the Founder was still ruling strong. Guru Ramdas was on terms of friendship with Akbar, who gave him a piece of land at Amritsar, where he dug the famous tank. Then the fifth Guru Arjundev built the celebrated Golden temple, which became the centre, the home, the rallying place for all Sikhs. It was in his time that the scriptures were systematised and given out as the Adi Granthsaheb. Now came the first Jehangir who succeeded touch with trouble. Akbar, put Guru Arjundev in prison on a charge of helping his rebel son: and the Guru later died of the hardships.

That was the point where this purely religious community began to change its peaceful character. Jehangir was followed by Aurangzeb and things grew worse: and then the sixth Guru Har Govind definitely began to organise the Sikhs in sheer self-defence into a compact body apart from Hindus and

Muslims alike. It was the tenth Guru Govind. who after thinking over the work that lay before him for every twenty years spent in retirement. determined definitely to separate off the Sikhs, from all possibility of confusion with men of any other faith. He therefore instituted the ceremony of Pahul, initiation. From that time the Sikh with his un-cut hair, the comb, the dagger, the steel bangle and the short breeches became a distinct man. A fundamentally religious movement was thus forced by pressure of circumstances into a militant organisation: but only thus could the great impulse given by Guru Nanak be preserved for posterity. That in short is the history of the Sikhs and Sikhism which aims to unite all that is best in Hinduism and Islam.

XIII Christianity

154. The Religion of the Rich West. From Sikhism we shall pass on to the study of Christianity. The number of Christians in India is not large, but being the religion of the rulers* it occupies a place of its own in our country. It is, moreover, the religion of the West which is looked upon as the Home of Science and Civilization at the present day. Europe and Am rica are richer than the rest of the world, and everything connected with the rich naturally attracts attention. ther the prosperity of the West is due to their following the Sermon on the Mount or to their ignoring it, is difficult to say; but, there is no doubt that the noble life of Christ and His Teachings have inspired millions in the past and do so this day, The selfless labourers of men and women, who leave their hearth and home and spend their lives in distant parts, doing what they consider their duty under the most trying circumstances, are still a wonder of the world, and they do all this for their love of Christ. The whole religion of Christianity centres round that great mystical figure, which has fascinated so many hearts and evoked the love and adoration of generation after generation in the Western Hemisphere; and it is with this wonder-

^{*} Note written in 1931.

ful life, that our acquaintance with Christianity must begin.

- 155. Myth and allegory mixed up. Unlike the Prophet of Islam a study of the life of Christ presents a difficulty in as much as He lived six centuries earlier, and a great deal of mythical element has entered the story. Parables were a feature of his teachings, and allegories commonly used to illustrate great Truths. All these inevitably got mixed up, and we have in the West scholars who are of opinion that there is nothing at all in the accounts of His life save myth and legend, while the orthodox claim that every word written therein is true. As long as we follow the old Aristotelian method of arguing from texts, this confusion is bound to arise. The scientific method is to question nature anew, and we can do this by looking into the past ourselves by methods of Yoga. But, while those faculties of ours are yet dormant it would be quite a reasonable position to take out of the story all that is ennobling without presuming to pass a judgment on the rest. That is what we shall attempt.
- 156. Life of Jesus. The child whose Jewish name was turned into that of Jesus was born in Palestine about two thousand years ago. His parents were well-born though poor, and he was educated in the knowledge of the Hebrew scriptures. His fervent devotion and a gravity beyond his

years led his parents to dedicate him to the religious and ascetic life, and soon after a visit to Jerusalem in which the extraordinary intelligence and eagerness for knowledge of the youth were shown in his seeking of the doctors in the temple, he was sent to be trained in an Essene community. At the age of nineteen he went to the Essene monastery near Mount Serbal, a monastery much visited by the learned from all parts of the then known world. He was here fully instructed in all the teachings which were the fount of life amongst the Essenes and it appears that he later visited Egypt, and perhaps other parts of the world. So superhumanly pure and so full of devotion was he, that in his gracious manhood he stood out preeminently from the severe and somewhat fanatical ascetics among whom he had been trained, shedding on the stern Jews around him the fragrance of a gentle and tender wisdom, like a rose in a barren desert. words though few were ever sweet and loving, winning even the most harsh to a temporary gentleness, and the most rigid to a passing softness. Thus did he live through nine and twenty years, growing from grace to grace.

157. This superhuman purity and devotion fitted the man Jesus to be the temple of a loftier Power, of a mighty indwelling Presence, and "John bare witness saying, I have beheld the Spirit descending as a dove out of heaven, and it abode

upon him.....And I have seen and borne witness that this is the Son of God." A celestial voice proclaimed Him as the beloved Son, to whom men should give ear. "From that time began Jesus to preach.....He met two brother fishers, and he said unto them, "Come, ye, after me and I will make you fishers of man." And they straight-way left their nets and followed him." To that manifested Presence the name of The Christ was rightly given, and He moved over the hills and plains of Palestine, teaching, healing diseases and gathering round him as disciples a few of the more advanced souls. The real charm of his royal love, outpouring from him as rays from the sun, drew round him the suffering. the weary and the oppressed, and the subtle tender magic of his gentle wisdom purified, ennobled and sweetened the lives that came into contact with his own.

158. By parable and luminous imagery he taught the uninstructed crowds who pressed around him, and using the power of the Spirit he healed many a disease by word or touch. Rejected by his Essene brethren among whom he first laboured, whose arguments against his life of loving labour are summarised in the story of the temptation, because he carried to the people the spiritual wisdom that they regarded as their proudest and most secret

treasure and because his all embracing love drew within its circle the out-cast and the degraded; ever loving in the lowest, as in the highest, the Divine Self, He saw gathering round Him all too quickly the dark clouds of hatred and suspicion. The teachers and rulers of his nation soon came to eye him with jealousy and anger. His spirituality was a constant reproach to their materialism, his power a constant, though silent exposure of their weakness. Three years had scarcely passed since His baptism when the gathering storm outbroke, and the human body of Jesus paid the penalty for enshrining the glorious Presence of a Teacher more than man. That was the GREAT CHRIST,

159. His Disciples. The little band of chosen disciples, whom He had selected as repositories of his teachings, were thus deprived of their Master's physical presence ere they had assimilated His instructions; and so, for a long time afterwards He visited them in His spiritual body, continuing the teachings he had begun with them, and training them in the knowledge of inner truths. They lived together for the most part in a retired spot on the outskirts of Judea, attracting no attention among the many apparently similar communities of the time, studying the profound truths. He taught them, and acquiring the gifts of the Spirit. Being thus fully instructed the Apostles went forth to preach, ever aided by their Master. Moreover.

these same disciples and their earliest colleagues wrote down from memory all the public sayings and parables of the Master that they had heard, and collected with great eagerness any reports they could find, writing down these also and circulating them amongst those who gradually attached themselves to their small community. The inner teachings given by the Christ to his chosen ones were not written down but were taught orally to those deemed worthy to receive them, to students who formed small communities for leading a retired life, and remained in touch with the central body. The former comprise the Gospels and Epistles which form the basis of present-day Christianity.

160. God the Father. All these agree in all essentials, but being written by different men it was not to be wondered at, if they differed in details, and as unfortunately a belief in these details was made a stringent condition of membership, Christianity divided up into many Churches. I know it is very difficult to give even a summary of the teachings of Christianity without treading on someone's toes, but we shall try, confining ourselves to certain broad principles, which may be acceptable to all. In interpreting the teachings of Christ we have to bear in mind all along the one fact that Jesus was born and bred amongst Jews and was a great Hebrew reformer, and so all his teachings have a background of Hebrew thought. The Jews

believed in a God and so did the Christ. The idea of God amongst the Hebrews had undergone many changes in the past. The angry Deity had already given way to "God the Lord, He that created the heavens and stretched them forth; He that spread abroad the earth and that which cometh out of it; He that giveth breath unto the people upon it, and spirit to them that walk therein." To this was added a demand for righteousness, for purity, a contempt for outward observances when they were not accompanied by inner nobility of character, and a resentment at the idea that any one would dare to offer to a Holy God the mere outer ceremonies. instead of a righteous and noble life. Thus we have in Christianity a personal God possessed of every possible perfection. He is as it were the Father of all mankind, nay the whole creation. He is the most loving of fathers, all-knowing, omnipotent and perfectly just. In manifestation God becomes triune, Father, Son and Holy Ghost: yet all three are One. Jesus Christ is the Son of God who came down to the earth, as the Saviour of mankind. It is God the Holy Spirit who speaks, teaches, sends forth messengers and gives inspiration. All the three are essentially One, who dwell together in a fellowship infinitely intimate and abiding in character. Holy men and saints share in that life, though to their limited capacity. God

^{1.} Isaiah 42:5.

created angels, some of whom became good, others evil. The former serve as patterns that humanity should strive to reach, the latter as object lessons as to the consequences of sins. Good angels are God's appointed messengers and ministers to His people in their pilgrimage on this earth.

161. God made man in His own image. God made man in his own image. St. Paul describes man as triple in nature "spirit, soul and body" "And the Lord formed man out of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul."2 Man's body is made of dust and at his death dust unto dust shall return. "Know ye not that ye are the temple of God and that the spirit of God dwelleth in you. The temple of God is holy".3 The indwelling spirit is immortal in its nature. Selfconsciousness and experience reveal three great spheres within which the human spirit fulfills its mission. These spheres are thought, volition and affection. The goal of the spirit is the conquest of and rule over this triple kingdom. For this he develops intellect, the instrument of knowledge, for which highways leading out into the infinite open out in all directions for a human being. A mastery over the will enables the spirit to choose properly amongst the things that constitute his

^{4. 1} Thessa 5:23.

^{5.} Gen. 2:7.

^{6. 1} Cor. 3:16.

enviornment. A healthy form will appropriate from its surroundings whatever is in harmony with the Inner Spirit, and rejects the rest. Love is the unifying power in humanity and among all rational beings. It incites the intellect to know what is useful to humanity, the will to choose rightly and then leads the Spirit to its fulfilment, Service. It is in order that the spirit of each man may learn these lessons that God has placed him on this earth, and surrounded him with all temptations.

162. A man reaps as he sows. During this process of training every man is divinely helped and guided, if he only turns inwards and prays. But as for his deserts in the meantime, "Let each man prove his own work, and then shall he have his glorying in regard of himself alone, and not of his neighbour. For each man shall bear his own burden.....Be not deceived: God is not mocked, for whatsoever a man soweth that shall he also reap."1 "Also each shall receive his own reward according to his own labour."2 "And shall he render unto every man according to his deeds."3 "Give and it shall be given unto you, good measure pressed down, and shaken together, running over shall they give into your bosom. For with what measure ye mete it shall be measured to you again".4 That is the fundamental law obtaining in this

^{1.} Gala 6:4-6.

^{3.} S Math 16:27.

^{2,} I cor 3:8.

^{4.} S Luke 6:38.

world, for is not God perfectly just? According to Christianity God is justice incarnate, and yet he tempers his justice with mercy. If a sinner repents, confesses his sins, and prays to the Lord he is pardoned. It will be noticed that the pardon is conditional on true repentance, and as long as a man has not really left the path of sin, his voice cannot reach God. "Behold the Lord's hand is not shortened that it cannot save, neither is his ear heavy that it cannot hear; but your inquities have separated between you and your God and your sins have hid his face from you, that he will not hear.1

163. The Commandments. For the guidance of people in daily life Moses had already given His commandments to the Jews, and these the Christ reexplained in his own way. These ten commandments can be divided into two parts. The first four set forth the duties of men to God. "The first commandment secures to the one true God His rightful place in the hearts and lives of men. The second has more special reference to worthy means or media of access to God. Images can not serve as true mediators. The one real and living mediator is Iesus Christ. The third rule is in the special interests of sincere and spiritual worship. It prohibits all unreal insincere and evil use of the name of God. The fourth would secure to humanity the fullest and richest life consecrated to

^{11.} Isaih 59:1.2.

God. It calls from excess of toil and for leisure for divine worship and service."

"The remaining six commandments serve to reveal to mankind the duties of men to men in the Kingdom of God. The fifth rule secures to worthy parcentage the honour due from children. The four succeeding ones would secure to humanity the entire heritage of good belonging to the earthly life. The heritage includes safety for life, worthy sexual relations in the institution of the family, security for possessions in property and the enjoyment of a reputation in harmony with true character. tenth commandment forbids covetousness. spirit which builds up a self-centered worldliness. and isolates men from each other and from God." All these have to be taken in the spirit of Christ's teachings and in conjunction with the following... "and if there be any other commandment it is summed up in this word, namely, thou shalt love thy neighbour as thyself. Love worketh no ill to his neighbour. Love therefore is the fulfilment of the Law."2

164. Devotion the key-note. It will thus be seen that along with Judaism Christianity believes in One personal God as the Creator of the whole universe, in the immortality of the spirit and

^{1.} Christianity by P. N. Buck D. D. Methodist Madras.

^{2.} Roman 13:9.

the responsibility of each man for his own actions. The New Testament is only a restatement of portions of the old Testament, as revised by Christ. himself a Jewish reformer rejected by His own people. Jesus Christ, as it were, poured the old wine into new bottles, after removing from it, what He considered to be the froth and foam. But it is interesting to notice, that these new bottles had a distinct colour of their own. In reinterpreting the Great Truths, the Christ painted for them a new background of Love and Devotion. The stern Creator now became the All-loving and forgiving Father. If any of His children approached Him with a sincere heart, he could feel certain not only of pardon, but of the highest reward that God could give him. Christianity thus became essentially a religion of the heart, and taken together with the wonderful life of the Founder, it has touched the hearts of millions of men and women. Constant prayer thus became a feature of Christianity, and most elaborate rituals grew round the simple worship. He taught His disciples at his Last Supper. places were consecrated to this worship, and so grew the mighty churches and monasteries of the West, all actuated by a feeling of devotion, all its own. These later gave rise to a special style of Architecture the Gothic, with its numberless delicate pillars rising to great heights in the heavens. Thus did Jesus transform the whole of Europe with His magic wand of Love and Faith. Even if some of His followers do not exhibit that great love of God that Christ enjoined on them, it must be admitted that they have cultivated a great faith in themselves, and that is the real cause of their success in life.

165. The Christ's Inner teaching. Insisting upon such great Love or Devotion towards God, it was only to be expected that the Christ should strike the same chord in the directions He gave for our conduct in regard to our fellow-beings. "And He said unto him. Thou shalt love the Lord thy God with all thy heart, with all thy soul and with all thy mind. This is the great and first commandment. And the second like unto it. Thou shalt love thy neighbour as thyself. On these two commandments hang all the law and the prophets". The world-famous Sermon on the Mount, as an exposition of this great principle of love. stands by itself. If may not appear practicable for every man in daily life, but we need not feel surprised at it, if we ponder over the lines that precede the sermon: "Seeing the multitude He went up into the mountain, and when He had sat down and his disciples came unto Him, He opened his mouth and taught them.....thus"2. The teachings were meant for the disciples, and he opened his mouth only before them, and for persons aspiring to that honour, the teachings were none too strict. Jesus did not give the same lessons to all. To the multi-

^{1.} S. Math: 22:37-40.

^{2.} S. Math. 5:1.

tude He taught in parables and stories, but for those who were worthy of it, He had stronger wine. "And behold one came to him and said, Master, what good thing shall I do, that I may have eternal life? And He said unto him: why askest thou me, concerning that which is good. One there is, who is good: but if thou wouldst enter into life keep the commandments. He saith unto him, Which? And Jesus said: 'Thou shalt not kill etc'.....The young man saith unto him; All these things have I observed: What lack I vet? Jesus said unto him: If thou wouldst be perfect, go, sell that thou hast. and give to the poor, and thou shalt have treasure in heaven, and come, follow me. But when the young man heard the saying, he went away sorrowful, for he was one that had great possessions. And Jesus said unto his disciples: Verily I say unto you. it is hard for a rich man to enter into the Kingdom of heaven." Thus did the Christ teach men at different levels, each according to his capabilities. The ordinary rules for the masses, for the chosen ones, voluntary poverty, meekness and chastity ...but for all, Love.....Devotion to God, charity to man. That is the essence of CHRISTIANITY. That too is all moral and yet much more.

XIV. Jainism.

166. The calmness of the Jain. The Jains of India are a comparatively small body, consisting mostly of merchants and traders: but they are nonethe-less a very wealthy and influential community. They have a vast literature of their own, both religious and secular. It has of course a great deal in common with Hinduism, but even the stories are told in the Jain literature with a distinctly Jain touch. Their philosophical treatises are noted for clearness of thought and subtle distinctions. well known Amarkosha, a lexicon, which every student of Sanskrit begins with, is a Jain work. The Tamil grammar, said to be the most scientific grammar that exists, is a Jain production; and the whole of old Kanarese literature is dominated by the Jains. They have not only been merchants, but kings as well in the past in Madura, Trichinopoly and other cities in Southern India. Even now they have very rich temples at Palitana and other places. Apart from all this the Jains carry with them wherever they go such a calm, philisophic, and non-violent atmosphere, that one feels impelled to ask as to how they got it. The secret is their Religion. "Man, by injurying no living creature, reaches Nirvana which is peace" is a phrase that seems to carry with it the whole thought of the Jains: peace, peace between man and man, peace between man and animals,

peace eyerywhere and in all things, perfect brother-hood of all that lives. Such as the ideal of the Jains: and every sincere man among them endeavours to live up to it.

- 167. Jain Tirthankars. Jainism and Buddhism (as we shall see later) are fundamentally offshoots from ancient Hinduism and yet they are not the same, as Western scholars once imagined. The Jains are far older and are mentioned even in the Vedas. They trace their origin to the first Tirthankara, holy sage, who was Rishabhadeva, the father of King Bharata, who gave India the name of Bharatavarsha. Although the Jain system is based upon the existence of a perfectly beneficent Power in this world, they do not believe in a personal God. They derive their inspiration from a succession of Tirthankaras, of whom the last one, Mahavira, the mighty hero, was the twenty-fourth. Unlike the Hindus who believe in Avataras Prophets who come down the Jain Arhats are all men who have climbed up from manhood step by step to perfection. Such a great One is a Jaina the conqueror, who has gained mastery ever his lower nature, who has reached Divinity, in whom the Jiva-spirit asserts his supreme powers over matter: from the Jain point of view. He is the Holy sage, the Arhat, the Tathagata, the Lord.
- 168. Mahavira. The last representative of this line of Great Jinas and Teachers was Mahavira,

who lived about the same time as Gautma Buddha, and there is a distinct similarity between the lives of these two Supermen. Mahavira, the incarnation of Ahimsa-non-injury was himself born into a family of warriors, as the son of a king. The child was born amidst great rejoicings and was named Vardhamana the increaser of prosperity. He grew up as a boy, as a youth loving and dutiful to his parents: but ever in his heart was the vow, that he had taken many lives before, to renounce all to reach illumination, to become a Saviour of the world. He waited until the death of his father and mother so that he might not grieve their hearts, and then taking the permission of his elder brother and the royal councillors, he went forth surrounded by crowds of people to adopt the ascetic life. On reaching the forest, he gave away all he had to the ascetics, and plunged into the jungle. There for twelve years he practised great austerities striving to realise the nothingness of all things but the Self. In the thirteenth year the light of the Self broke upon him; he reached illumination; and the knowledge of the Supreme came to him. He shook off the bonds of Avidya, and became the All-knowing Jina, the conqueror. Then he came forth into the world and taught the Truth for forty two years of perfect life.

169. The Jain scheme of life:—The Jains begin with two fundamental existences, eternal, uncreated, the root and origin of all that is, and from

which springs up the whole universe. One is Jiva or Atma, pure consciousness, the knower, the Life; the other is Dravva, substance on which the Jiva acts, the knowable Matter. All substance has its own properties and is capable of modification. The world is the result of interplay between these two. Jiva and Dravya. The Jiva evolves by gaining mastery over matter, through repeated incarnations, and under the beneficient Law of Karma, according to which every man reaps as he sows. This control can be obtained most quickly if the man follows the three paths which lead to deliverance. They are Right knowledge, Right faith and Right conduct To these are added Austerities at a later stage of evolution. Right conduct is further of two sorts, with desire and without desire. The former gives sovereignty of the Devas, but the latter alone will lead to final liberation from this round of birth and death. Such is the philosophical view of the Jains, and it will be seen that it is fundamentally the same as amongst the Hindus with a few frills omitted.

170. The Jains have a sort of a caste, but the majority of them are Vaishyas and their Brahmins or Yatis are recruited from all the classes. So we have really two main castes Shravakas or householders, and Yatis or the ascetics. The rules of conduct laid down for all are practically the same with the difference that the Yati carries to perfec-

tion the various qualities, while the layman is preparing to do so in some future life. Right conduct thus means for the Jaina:—Ahimsa-harmlessness. Sunriti—truthfulness, Asteva—not taking that which is not one's own, Brahmacharya—continence and finally Aparigraha—not grasping at any thing, absence of greed. The rules are the same, both for the layman and the Yati, but are interpreted differently. According to the last commandment, a layman should not be covetuous, or full of desire. while the Yati should renounce every thing and know nothing as "mine or my own." And so on. Of these qualities the Jains lay very great stress on the first, Ahimsa, which has thus become the key-note of their whole religion. is my pain when I am knocked or struck, beaten, tormented or deprived of life, and as I feel every pain and agony: in the same way, be sure of this, all kinds of beings feel the same pain and agony as I. For this reason, all sorts of living beings should not be slain, nor treated with violence, nor abused nor tormented, nor driven away. This constant, permanent, eternal true law has been taught by all wise men who comprehend all things." This dictum does not remain only in the books of the Jains, but they are the only people in the world today, who will not kill a scorpion that stings them, or smash a serpent at sight. This may be considered by some as going to extremes, but if so, it is an excess of compassion, and ennobles the soul, even if it clashes with man's worldly interests.

171. Small vows:—Then there are other minor precepts as well. All intoxicants are strictly forbidden. A Jain should begin every day with a quiet, self-conscious reckoning of life as it were, by meditating on his Gurudeva, and on his duties. Then he is to think of the Tirthankars and decide in what respect he is going to seek perfection that day. He makes a certain vow that he will, that day or for a week, abstain from a particular kind of food, and consciously keeps it. The goal of his life is to get complete command over his bodies, and he may begin anywhere. For instance a Jain may decide that he will not sit down on the ground at all during the day till sunset, and he will stick to this. A boy is taught to make such promises and to keep them, and the result is that it checks thoughtlessness, it checks excitement, and that continual carelessness which is the bane of human life. He always thinks before he acts, because his body is taught to follow the mind and not to run in front of it, as it does too often. So a good Jain does everything in a cool and collected manner. I have a Jain friend who opens his letters (and he gets a number of them) with a pair of scissors, so religiously that unless you look at them carefully, you would not find out if they were opened at all. Unlike most of us, he writes a beautiful hand and sheets at a time:

and all this is the outcome of years of little vows. These may be trivial in themselves but a practice carried out on these lines for years means a great step in evolution. That is what makes the Jains so collected and dignified. Our "educated" men might note that it is the Jain's religion that has made him what he is.

XV. Zoroastrianism.*

- 172. Peculiar interest of its own:—We have all of us heard of the conquest of Cyrus and Darius. and the vast empire that they built in Persia: but perhaps not many of us associate those names with the Parsees of India. Yet they are all the followers of the Prophet Zarathushtra, who preached in ancient Iran many centuries ago. His teachings, or Mazdayasnian religion as it was called, flourished in that land for a hundred generations and it was under Cyrus and Darius that the national flag of State and Zoroastrianism, welded together in unity, proudly floated over untold millions, who claimed protection and paid homage to the Persian court. That great Nation was shattered by the ravages of time and all that now remains of the Great faith are the handful of devout followers known Parsees, who left Iran and settled down on the west coast of India. The Teachings of Zarathrushtra which made that glorious civilisation possible, have therefore a peculiar interest of their own.
- 173, Practical Morality:—We shall leave the learned scholars to settle the date when Zarathrushtra was born; but there is no doubt that He lived long long ago in what may be called the

^{*} The Teachings of Zoroaster by S. A. Kapadia (Murray).

dim past of history. King Gushtasp who ruled Iran at that time, charmed with the Personality of the Prophet became his follower, and so His teachings spread rapidly. On these was founded the Persian civilisation essentially agricultural in character, but permeated through and through with the idea of the practical side of life, intended to train men practically in a noble faith and sublime moralitv. He did not give a metaphysical philosophy and an exoteric religion linking the two together, but interblended the two so that it is wellnigh impossible to give an idea of each separately. A perfect practical purity is the keynote of that morality: purity in every action of daily life, purity in every relation to external nature, honouring the elements as the manifestations of the Divine purity, guarding as it were their spotless cleanliness as an homage to the Life whence all proceeds.

174. One God and His agents:—The Zoro-astrians believe in the existence of one God Ahura-Mazda, the Brilliant, the Majestic Greatest, Best, Most Beautiful. At one time it was commonly held that Ahura-Mazda Himself issued from Zeravan Akarana, Boundless Time or the Unknown Cause. This is considered by some as a grammatical blunder, but I mention it only to show that the idea of creation out of a Formless is not unknown to them. Ahura-Mazda is the One "who created us, who formed us, who keeps us, the Holiest

among the heavenly." He is "three-fold before other creatures, but really One. He is the Light and source of Light. As a Ruler of the world he not only rewards the good but is a punisher of the wicked at the same time.

"Unspeakable, who sit'st above these heavens,
To us invisible or dimly seen?
In these thy lowest works, Yet these declare
Thy goodness beyond thought and power divine."

From Ahura-Mazda proceed two principles Spento-Mainyush and Angro-Mainyush, the good and evil-The evil spirit is not a rival but a servant of the Lord. Only men are warned against it. Next comes Armaiti to succor this life. These are assisted by the hierarchies of heavenly intelligences, led by the great spirits Ameshaspentas, the seven presiding angels. Of these the foremost and the most helpful is Fire, called the son of Ahura-Mazda. He is the symbol of divine life, the sacred symbol most reverenced by the Zoroastrians. Tradition has it that when Zarathrushtra used to preach of this Great Fire, by his side stood an altar with fragrant sandalwood, and as He invoked the Lord, the Lord sent His Son in response: the heavens burst into flame and lit the wood on the altar. That was the Parsee's Sacred Fire which they so carefully preserve undefiled to this day. Before that every Zoroastrian bows and in the Parsee homes, when sunset falls, a fragrant fire is carried through every room in the

gathering dusk, as the emblem of the purifying and protective power of the Supreme.

175. Physical Purity. "Ahura-Mazda is in possession of all good things, spiritual and worldly. and he grants these gifts to the righteous and the good. The Zoroastrian is therefore asked to be for ever on the side of the good and to fight evil. He is to strive with all his might to maintain the Lord's creation pure, that is free from evil. He is always to battle for the pure in every walk of life. The earth is the pure creature of Ahura-Mazda and must be kept pure. He must till it and perform all the functions of Agriculture, as service to the Lord, for will he not thereby remove all the putrifying things from the soil and raise wholesome food? The air must be kept pure, and hence the incense in every Parsi house. The water must be kept pure. If anything unclean like a corpse falls into water, the good Zoroastrian must remove it. that the pure element may not be defiled. Fire must not be polluted by the burning of decaying matter, which must be disposed of in some other way. Hence the Zoroastrians will neither bury nor burn a dead body. They carry it reverentially to the Towers of Silence and in that guarded place open only to the heavens, give it to the vultures who swiftly devour it, and no pure element on the earth is defiled. This purity of an external nature, with which a Parsee must not only passively but

actively associate himself is a great feature of Zoroastrianism. It makes them invulnerable to diseases, and lays for them a hygienic foundation for their existence on this earth.

176. Purity of Thought, word and Deed. From a sound body a Zoroastrian naturally goes to a sound mind and we see this reflected in the famous maxim of his religion. "Turn yourself not from three best things. Pure thoughts, pure words, pure deeds." By "good thoughts" he is able to concentrate his mind in Divine contemplation, and to cultivate a feeling of peace, unity and harmony with his fellowbeings. By "good words" he is enjoined not to hurt the feelings of others, not to break his contract with them, to observe honesty and integrity in all commercial transactions. By "good deeds" he is directed to relieve the poor and deserving, to irrigate and cultivate the soil, to provide food and fresh water where they are needed, and to devote the surplus of his wealth in charity for the wellbeing of others. That is the secret of the charity that has made the Parsee so famous. I have heard a well-known Parsee gentleman proclaim that whenever he has given away in charity he has never known his wealth to decrease by that amount. You do not give money because you get it: but you get it because you give. That is the Law of life: and the Zoroastrian's understanding and living of this great truth has made them the wealthy community they are. It is said that the Parsee community suffered least from bubonic plague in India, presumably because they lead a more hygienic life, all because of the passion for purity that their Prophet has implanted in them: purity in body, purity in thought, word and deed. That is the essence of the Teachings of Zarathrushtra, which has enabled this handful of men to retain their place under the Sun. And yet our "educated" see nothing in Religion.

XVI. Buddhism.

177. Last but not the least. In our Survey of Religions, we now come to Buddhism, which is the religion of one third of the human race. In trying to understand the teaching of Buddha it is necessary to bear in mind all along, that he was born a Hindu lived amongst Hindus and preached to Hindus. He did strike a different note, all his own: and vet the background of his thought was essentially Hindu. In spite of all the philosophical doctrines and the Upanishads in which ceremonies are freely ridiculed the religion of those days had become a maze of rituals, of which animal sacrifice was a great feature: Buddha by the sheer force of his personality which beamed compassion, and constant preaching for years, completely broke up this shell and made the people think of the inner meaning of sacrifice, but he could do no more. It is true He made many disciples, and later, under king Ashoka, his tenets became a State religion and spread far and wide, to all the corners of the then known world. Buddhism spread to Ceylon, Burma, Tibet, even China and Japan; but by a curious irony of the fate is quietly dropped out of India. Although it has the largest number of adherents in the world, in India the land of its birth, the Buddhists are a mere handful. spite of this, the Buddha is still considered by all the Hindus as the ninth Avatar of God and is so respected. Gaya, where he obtained illumination, and Sarnath where he delivered his first sermon, are considered holy places in India, and attract pilgrims from all the Buddhist countries. Buddhism is thus a great living force in the world, and though we have placed it last from another point of view, it is certainly not the least.

Avataras of the Hindus Shri Ramchandra and Shri Krishna—Buddha was born a Prince. The Astrologers predicted at the time that he would be either a great emperor of the world, or a wandering holy man; and his father King Sudhodana was naturally anxious that he should not choose the latter course. Knowing that most people take to an ascetic life only as a result of disappointments, the king surrounded the boy and then the youth, with all the best things in the world that love or money could procure. As Arnold puts it "Some new delight (was) provided every hour." The King married the Prince to the fairest maiden of the time "with a form of heavenly mould."

And "Yet not to love Alone trusted the king: Love's prison house Stately and beautiful he bade them build, So that in all the earth no marvel was Like Vishramvan, the Prince's pleasure palace" "Furthermore

The king commanded that within these walls No mention should be made of death or age Sorrow, or pain or sickness" The Prince was thus brought up in the pleasantest surroundings possible and the king thought:-

"I shall see him grow, The king of kings and glory of his time."

179. Yet all these golden and silken threads failed to hold their prisoner. The Prince in the midst of the revelry began to get restive and to think. "Are all the people in the world as happy as I am."

He wanted to find it out. The king became alarmed and tried to prevent it as long as he could; but at last the Prince was allowed to visit the town, after all the men had been commanded to make a Joyous crowd. As fate would have it, something went wrong, and the Prince discovered that all that glittered was not gold. People were unhappy, subject to diseases, old age and death, and not even the King himself or the Prince or the "beauteous" Yashodhara were exempt from the ravages of time. This made Sidhartha restless and all the pleasures palled.

"I will depart," he spake, "The hour is come I lay aside these realms
Which wait the gleaming of my naked sword
This will I do because the woeful cry
Of life and all flesh living cometh up.
Which I will heal if healing may be found
By uttermost renouncing and strong strife"

He determined to go out into the wide world and seek the remedy.

180. He left his kingdom and searched for his goal for twelve long years. He tried many teachers, but not being satisfied with the solution they offered him, he retired into the forest. After the days of suffering and privations, by sheer dint of hard thinking, at last He attained Nirvana. He understood the great Mystery of creation, the four noble truths as they are called. He discovered that all suffering was due to our clinging to existence. that the cause of our suffering was the thirst for pleasure: that suffering would cease only with the complete cessation of desire; and that the way to do it was to avoid the two extremes of self-indulgence and constant self-mortification and to follow the noble eight-fold path. Having arrived at the solution of the problem of "sorrow," he spent fortyfive years of His life, wandering over India of those days, preaching the remedy. He put the ancient truths in a new form, making them ready for the training of vaster multitudes. Thus lived the Great Teacher, who spoke the Indian tongue, who loved the Indian people, who instructed them and who worked for them. He was a flower that bloomed on the Indian soil, and the sweet fragrance of his compassion spread outwards, overflowing the world. That was Gautama Buddha, The Tathagata, after whom the religion is named.

181. Buddha Essentially a Hindu Reformer It has already been pointed out that Buddha was essentially a Hindu Reformer, and many difficulties arise in the study of this religion by forgetting this fact. He used to illustrate his teachings with stories from his past life, a number of which, The Jataka, are still available, and yet, when he was asked if reincarnation was a truth, He would say, "Why bother?" As another great Teacher said, "Sufficient unto the day is the evil thereof," "You lead a good life according to the noble eight-fold path and leave the rest to the Good Law." In the Jataka stories he often mentioned that when he was born a Deva, in a bygone age, he did such and such a thing; and yet, when people wanted to know, if the Devas exist, he replied, "What does it matter to you? If the poor fellows exist, be sure they have their own troubles. Do not depend upon them; for are we not all of us subject to the great Good Law? "That was the manner of his teaching. He was constantly dragging down men from abstruse theory to practical difficulties. He infused into the formalism of the time a spirit of practical morality. But none-the-less the solutions He offered were based on the Great Truths within

182. The noble eight-fold path. In the noble eight-fold path, the Lord Buddha has left for us the essence of his practical teachings, tabulated in a way which is easy to understand and easy to remember.

- (i) The first step is right Belief, not a blind belief as some imagine, but a conviction that there is a Law of Eternal Justice which rules the world.
- (ii) The second is right Thought. It demands that we should always think of higher things, of helping the world, rather than of our own little troubles. Also that our thought must be definite, deliberate and what is more, correct. We should think the truth only and not attribute motives, where we do not know them.
- (iii) The third is right Speech. It is not our business to speak evil of others. We must not exaggerate. We must speak in a kindly way, and only such things as are helpful.
- (iv) The fourth is right Action. If we have kept in mind the first three rules, right action is bound to follow. Action must be prompt and yet well considered. Above all, it should be as unselfish as we can make it.
- (v) The next is right Means of Livelihood, that which causes no harm to any living being. A good man should not earn money by doing something that does harm to Society by "trades that transgress." He should be honest and straightforward in his dealings.
- (vi) The sixth step is right Exertion for, without constant effort we can achieve nothing in this

- world. Whatever work we have to do we should do it carefully and expend our energy in the best possible manner. We should do every thing in a calm and collected manner, and not only 'cease to do evil," but "learn to do good."
- (vii) The next is right Memory, which means that a wise man should only remember all the good things and let the evil die. We get all sorts of impressions in the world, and we must not preserve all these in our brain. We must discriminate, forget all that is useless, and treasure all that is ennobling.
- (viii) The last step is right Meditation—on the noble things we have treasured. Whatever we may be doing in the world, we must always seek in it, the purpose of our existence. "What am I? Whence did I come? Whither am I going?" If such thoughts form the background of our mind, they will instantly come to the front when the mind is not otherwise occupied. That is right meditation.
- 183. Buddha's Scientific attitude. We have tried to glance at the wonderful life of Prince Siddhartha, who was surrounded by all the best that the earth could give, and yet renounced it all to seek deliverance from sorrow for the masses. We have seen how after years of toil he realised what sorrow was, and the way out of it, and how

he preached this Good Law for more than four decades. But the most interesting thing of all, was that the Buddha used to tell his disciples, "Do not believe a doctrine because it is so written in some books, or even because I the Tathagata, the Enlightened, say so. Ponder over it and take it only if it appeals to you?" That sounds almost modern and Baconian. There is nothing unscientific about it, and we should do well to recognise that it was He who thus set the stage for the present scientific thought.

XVII. Scientific Religion.

184. A Thread that runs through all religions All that we have attempted in the previous chapters is a mere bird's eye view of the teaching of the various religions. An exposition of these is impossible within the short space, nor is my poor and scanty knowledge of the subject equal to the task. All that I have endeavoured to do is just to play in succession the distinctive note that each religion strikes: Duty, Brotherhood, Devotion, Love, Harmlessness, Purity, and Right Conduct, in the order I have followed. There is no doubt that each faith has a characteristic touch of its own: but we cannot help noticing that a very great similarity exists in their teachings, and a golden thread seems to run through them all. We have tried to study the religions in a synthetic manner, but it is interesting to notice that others who have chosen follow the comparative method have also come to the same conclusion.

185. Western Scholars say the same. During the last century, Europeans with their great thirst for facts, have been digging in every corner of the world for relics of the past, and have unearthed a vast literature written on clay tablets or papyrus rolls. To their surprise they found that a man

who understands the hieroglyphics of Egypt can translate those of the Mayas in Mexico with equal ease. Symbols like the cross, or the triangle used in religious rituals have been found baked in clay in parts of the world, and in the ancient monuments. In the long buried fragments found by these antiquarians and archaeologists, the dead have given up their secret; and with the evidence thus made available, comparative Mythologists have proved to the hilt that all religions have a single root, the same doctrines, the same tradition of a divine human Founder, the same morality, and the same symbolism. Explorers amongst savages have also found that behind all the barbarous totems lay the idea of one great Presence. The existence of the same fauna and flora in widely separated regions like Egypt and America, showing that these continents must have been connected at some time in the past, has made this theory more probable; and it is now admitted on all hands that all religions have a common foundation.

186. Founded on Human Ignorance. That foundation is said to be human ignorance. The savage barbarian must have personified the powers of nature. He saw the Sun in his majesty; he heard the wind in its fury; his frail bark was lashed by the angry waves; the skies themselves burst into fire, and thunder; and the very earth under his feet shook and was shattered to pieces at times. Is it to

be wondered at if he fell on his knees, begged to be forgiven, and tried to make friends with the powers that be? Thus was "God" born out of ignorance and fear. After "God" came his agent on the earth the "Priest." who for selfish motives played upon the savage's misty fancies, his terrors and his hopes. Once having caught the poor dure in his clutches the devil, in order to gratify his own passions, even led him on to phallic worship; and out of these arose all religions, no matter what they might be today. In the opinion of these scholars "God" has also evolved along with the savage, as can be clearly seen from the Vedas, which contain the "babblings of childish humanity." The humanity may be childish but what about the child's father? Did he have any? They don't think it necessary to bother about.

187. Religions not started, but emerge. Let us take from the comparative mythologist the common origin of all Faiths, and his "child-humanity"; but add to it the not very unreasonable notion of the existence of the child's Father. The Scriptures of Humanity will then become not the babblings of the children, but the notes written for the child, or by the child, embodying the Teachings given to Humanity from time to time. Portions said to be revealed "the Shrutis, things heard" can be compared to Text-books written for the child by the All-Wise Father, or His Agents the Seers and Pro-

phets, while the Gospels, the Hadees, the Smritis (things remembered) would consist of notes made by the children of what they remember, both handed down from generation to generation more or less in the form in which they were received. As we all live in a perfectly ordered Universe, these Teachings must necessarily be in conformity with certain Eternal Verities, but there will always be portions which apply to local conditions. That our physical bodies require food would be true of the child as well as of the grown-up man, but the same sort of food will not do for both. Similarly what may be considered permissible at a certain stage of evolution may be wrong at another. The growth of the child's body is of very great importance in the earlier years, but as it grows the mind will have to receive greater attention. The Essentials will always remain the same, but the details will differ; and that is why Supermen are born (or are sent by the Father, as some people would say), who while reasserting the Great Truths, show men what is the right thing to do under a certain set of circumstances, by example and precept. A Superman or Prophet does not start a new Religion, as we do a spinning and weaving mill, but his exemplary life and the wonderful teachings attract the attention of mankind. His appeal goes to their hearts and they begin to follow Him; and out of the converging devotion of the numerous followers emerges a new Religion.

- 188. New problems arise:—But in an everchanging world, where everything is in a state of flux, new factors come up to the surface giving rise to fresh problems. For the solution of these mankind needs more guidance, which is given by another Superman and so on. For instance we can easily see that the very growth of modern Science and the rapid means of communications, which have resulted in a churning up of the whole world, have today given rise to problems never thought of before. The Hindu-Muslim problem did not arise when the Prophet of Islam lived and taught in Arabia, simply because the followers of the two religions did not come into contact in those days. Today not only these two, but the followers of all Faiths have to rub shoulders with each other every day; and all of them have to count with men and women, who deny the very necessity of Religion itself. A grave new situation has arisen, in which we are called upon not only to reconcile one Religion with another, but all of them with Science—a task which appears well-nigh impossible when we look at the differences which are so apparent,
- 189. Unity behind Diversity:—Diversity of form is the essence of creation, and is, in fact, what lends charm to it. As long as we confine our attention to the surface, these differences will remain. But if we accept for a moment what all Religions have told us, that all these forms are but the mani-

festations of the ONE LIFE within, and try to search for that golden thread that runs through them all, we shall see that the problem is not insoluble. For this purpose what we need, is not a comparative study to find out where Religions differ, but a synthetic study to discover what is common to them all, and then again to see what is common to Religion and Science. A synthetical study of Religion and Science to discover the Philosophy that underlies them, is the first step towards an understanding of the Problem that faces the world today. That is what we have attempted here.

190. Greatest common measure :- Like seven notes of the gamut, or the seven colours of the spectrum, we have glanced at the seven Great Religions, and no doubt there are many more overtones equally interesting. For a fuller understanding of Religions the reader is referred to "Essential" unity of Religions' by D. V. Bhagwan Das (Rs. 2-8-0 Indian Book shop, Benares). Like none of the Notes or Colours, none of the Religions are in themselves good or bad. If they all stand side by side peacefully knowing that all form part of the Whole the colours composing One White light, they produce harmony and a splendid picture. When they try to have mastery over one another as in a storm we have confusion. Diversity and disorder are two quite different things. We can have the one without the other, if we but try to

concentrate upon the Unity beneath the surface. If we look at the Religions in this way we shall see that certain Great Truths and moral Laws emerge out of them which we may call the Greatest Common Measure of the Religions (G. C. M.) which we might formulate something like this:—

- (A) Just as matter is indestructible, so is LIFE; and both are inseparable within the realm of Time and Space, where everything is in a constant state of FLUX.
- (B) There exists a Benificient Cosmic Power which governs the whole Universe, irrespective of the names under which it is worshipped by people of different religions.
- (C) All the creation having been derived from that One Cosmic Power, the relationship of the various components is essentially that of Brotherhood, irrespective of difference of Race colour, caste, creed, sex, name and form.
- (D) The whole Universe is governed by a Law which works with unerring precision, and so every man is himself responsible for all that happens to him, and is the architect of his own destiny and hence the laws of morality.
- 191 Scientific Religion:—If we ponder over these Eternal Verities carefully, we shall see that they are not at all incompatible with the discoveries

of modern Science. Provide the child humanity with an All-Loving Father: Man with an immortal spirit within: and extend Newton's Laws, the Laws of Cause and effect, to moral and spiritual realms and the trick is done. Like everything else in Science let these Laws form only a working hypothesis, with which to verify all our experiences, in the light of all that is written for us by our Scientists and Seers, Modern and Ancient, in the Rationalist Press association Series as well as in all the religious books of the world. That is what I like to call a Scientific Religion, and therein lies the answer to the questions we began with. In the old days it was possible for men of different religions to live apart; but the world has become too small for it. If religions are a restatement of the great Truths suited to the time and place than the locomotive ridden world of to-day needs such a restatement. I submit we have it in this scientific religion. The various ceremonies prescribed by the religions are no doubt useful in their own way. but as all the Prophets have told us, they must be done with the heart, and not with the tongue only. Keeping this in mind, let us take part in all these, each according to the faith in which he is born. Or it will be better still, if we can perform our Sandhya Vandan according to the Vedic rites, and then pray in the Mosque according to the Quran, and thence proceed to the Holy Mass in a Christian Church and so on.

Beginning a day's work in a school with Prayers of the Religions, an act of Common worship would be a very good way of cultivating this spirit at that stage. An understanding of the problem will come at a later stage. The Solution of the Great Problem that faces Mankind lies in this direction.

192. Conclusion:—In our search for an answer to the eternal questions "Who am I? Whence did I come? Whither am I going?", we first defined our attitude towards these deeper problems of life, which sooner or later confront every thinking human being. We assumed ourselves to be a mere "fortuitous concourse of atoms" and saw how its logical consequences were not acceptable to our "Inner Man". We then went through a number of facts, which have been studied in a throughly Scientific manner, and which call for an explanation, which a materialistic theory of life fails to give. Do our dead die? was naturally the next question, and we tried to recapitulate why a man like Lodge feels convinced that. "They do not die." We tried to trace the cause of the present day antagonism between Religion and Science, and to show how Religion gives a sanction which a mere code of morals lack. We then attempted a birds eye-view of what the various Religions of the world have taught us for ages, and how very similar their teachings are, and how certain great truths emerge out of the din of dogmas, which give us a fairly satisfactory answer to the questions we started with. We tried to make out a case that there is no "Science, and Religions (in the plural) have no existence." It is all RELIGION—the Science of Life, and I wish to entreat my educated countrymen, to seriously consider whether this is all "rubbish that must be thrown on the scrap-heap," Personally I am convinced that we shall be victorious only, if we allow these truth to permeate our whole life, as it did before. And that is why, on this day, when the rosy dawn of India's freedom is seen on the horizon. I am anxious to paint the back ground of our education with this brush. Technical education and industries will certainly form the figures in the front, but without this Scientific attitude, we shall only go the way the West has. Materialistic Science alone meant a great war and spells greater wars in future. Let us beware.

PART II

XVIII. Outer appearance as seen by the anthropologist.

193. The World problem an individual problem:—Having taken a bird's-eye-view of the universe from both ends, we shall now try to obtain a closer view of Man as a type. A great thinker asserts that the world-problem is essentially the problem of the individual; and the world will progress in reality, only when each member of society looks within himself, understands his own problems, aims at a higher standard and attains it. Diversity is the essence of creation, and each individual necessarily differs from others. No two men-not even two brothers born of the same parents and brought up under the same roof—are the same in all respects. They may eat the same food, and yet their bodies will develop differently. The contents of their minds will vary very greatly. Their tastes, their way of looking at things, their power of understanding, their ideals in life, will not be the same; and one hard and fast rule will never serve even The circumstances which surround these brothers. them will further present different problems, which will demand different solutions. Each individual will have to find out his own way. And yet these

diverse individuals make up the world; and their activities are all complementary. Every individual has a distinct role to play on the world's stage, and if only each one played his own part perfectly, it would be unnecessary to look for a paradise after death. Before an actor can do justice to his part, he must know that he is not the puny patawala or the poor primary school teacher, but an individual unit, with Divine possibilities. And that is why, the ancient philosophers wrote on the doors of the temple at Delphi "MAN KNOW THYSELF." We shall try to follow this advice.

194. Colour of Skin:--When we take a closer view of man the first thing that strikes us naturally is his appearance, in which the colour of his skin has somehow assumed an importance all its own. If some men are white, a great many have darker skin, and a very large number have skin of a vellowish hue. In olden times all these groups used to live in different parts of the globe, under varying climatic conditions: but the modern improvements in communications have thrown them all together. Hence the "whiteman's burden," the "black menace." and the "yellow peril." The white races who live in colder countries have necessarily to bustle about, if only to keep warm. They have to consume more food to get the required heat; they put on more clothing to preserve it, and must have better houses for the same purpose. Fortunately they can work longer hours in their climate without fatigue. On the whole, they are a very industrious people. They developed modern science to its present pitch, and the Power machine was born in their midst. All these factors have enabled them to obtain mastery over multitudes who live in hotter regions, where labour is tiring, where men can get on with less food, less clothing, and where they can live out of doors for a great part of the year. These are naturally more lethargic than their shivering cousins. Moreover their philosophers taught them for ages that they are Immortal Souls, for whom this earth is but a temporary abode, and that gave them no incentive to work hard. They were therefore content to live an easy contemplative life, until the busy bees from the West invaded their tropical gardens. After a century's contact with them, and having tasted the sweet honey collected by the Westerners, the Orientals have begun to feel that they too might try to make the best of their short stay in this world. Their minds are unsettled. They are getting determined to gather their own honey from their own gardens; and they are really becoming a "Menace" and a "Peril" to the busy bees. But there is nothing "dark" or "yellow" about it.

195. Colour not even skin-deep:—The colour of the skin is only due to a thin layer of pigment in the skin and is not even skin-deep. That

is one of nature's contrivances for protecting nervous system from the rays of the Sun; and even a few days of exposure to the tropical Sun will darken a fair skin. Tanning the skin in this way was almost a craze in Southern Europe; but all this browning is comparatively temporary. It is only after hundreds of generations that we develop a really fast colour; but even this pigmentation derived through heredity for centuries gets dissolved in leucoderma, without affecting the person in any other way. The chameleon can change its colour from pale yellow to brilliant green or red in a moment, and yet it remains the same. The colouring serves the chameleon as camouflage and helps the man to withstand heat, perhaps sets up a new standard of beauty, but it is all an accident, and cannot determine once and for all time the character of the inner man.

Not only do people differ in the colour of their skin but in other respects as well. Mankind on the whole is a conglomorate in which all sorts of characteristics are mixed up; and a really pure type is very rare. Yet on a careful analysis we can divide mankind into three great Races, which we may call (1) The Dark, (2) the Yellow and (3) the White. The marked characteristics of each race are given in Diagram and need not be repeated here. Some of these features are no doubt the result of

environment, but no one now considers the old theory of natural selection sufficient to explain the whole process of evolution. People have been shaving their heads clean for the last three thousand years, and more, and yet their offsprings are born with hair just as before. Prominent lips, narrow eyes, an aguiline nose are not the result of mere climate, nor are they only acquired characterestics. They do point to something beyond. By judicious breeding, we have been able to develop within a man's life-time hundreds of distinct varieties of particular plants and who knows but that some Superman may not be carrying out similar experiments with human beings, trying to copy some Archetypes as Plato suggested. If such Beings exist, they must obviously be capable of watching the results of their labours, Supermen over generations. If the Inner man is really immortal and has risen above physical life and death as we understand it, there would be nothing absurd or improbable about this.

197. Races differ greatly:—Not only do the various races differ in their external appearance as stated above, but their very nervous system seems to be differently constituted. Writing of Japanese Soldiers, says Col. Hefir:— "In 1894 they bivouaced on frozen ground. They marched in the face of driving winds and blizzards for miles and miles over stony ground slippery with ice or frozen sleet

or snow, starting at 2 or 3 A. M. daily, and frequently not ending their march until late at night. Some of them even marched under such conditions with frostbitten feet, their worn-out shoes offering no protection...... It is well-known how the Japanese bear pain wonderfully. In hospitals at Port Arthur, little Anaesthesia was adopted even in large and long operations." No doubt some of this hardihood can be understood, when we remember that burning cones of incense on the child's hand till the fire ate into the flesh was a common punishment in Japanese Schools, only a few years ago; but it is not all an acquired virtue. It is a characteristic of all the vellow races; and perhaps is a feature of the Archetype after which these races were modelled.

198. Races differ in their very language and temperament:—Not only is the very structure of the nervous system different, but even the words used by the various races are characteristic. For instance in the language of the Australian and Paicific islanders there are separate words for the left hand and the right hand, significant of the use made of each; but there is no word for "hand", A tree by the river has a special name so has one which gives friendly shade on a hill; but there is no word for a "tree' as such. Even inanimate objects are endowed with life, and known by the qualities that are uppermost. They are all proper nouns

as it were; but common nouns are unknown in their language. The life of the Dark races is more "subjective" than that of the yellow races. The Red Indians are much more objective, and perhaps no one has more admirably developed his intelligence for solving the practical problems of life, than the Red Indian, whose observation, resource, memory, inventiveness and courage have won innumerable tributes from travellers.

199. The Dark or Negroid races are more under the dominence of their sensations, and therefore live more in the present. The Yellow or Mongolians, having developed their memory a great deal, always view their sensations in the light of their past recorded experience, and are thus governed by their Emotions.—hence their ancestor-worship and hero-worship generally. Their Past dominates their present. The White or Aryan races try to look for the Law that runs through their experiences, which enables them to visualise the future that is likely to unfold itself, and so they mould their conduct accordingly. They live in the future as well as the past and present. The White races. being more or less in their infancy, this characteristic is not yet fully developed. A very great majority of people in the world are still at the Yellow or Emotional stage. But we can see unmistakable signs of the tendency to judge the future by the past; and when that is better established, the

Aryan races will be known by their regard for Science. If Mankind has developed so far in three great stages—Sensations, Emotions, and Intellect—it does not seem so unreasonable to imagine that perhaps in future, our lives in the next Race will be dominated by the greatest of all Facts, that All LIFE is ONE, so that men will then have a far better understanding of each other, without laborious arguments. They will be more initutional and sympathetic.



Race of Mankind.

	3rd Root-race	4th Race	5th Race
	Lemurian	At lantian	Aryan
	Negroid	Chinese	Aryan
Skin	Dark	Yellow	White
Hair	Wooly	Straight	Curly
Beard	Bushy	Scanty	Well- developed

Cheek-bones		Broad		
${m E}yes$	Prominent	Sunken	Bluiesh	
Nose	Broad	Small	Pointed	
$oldsymbol{Lips}$	Thick-red	Small-pale	: Small	
•			prominent	
Live more in	n the Present	Past	Future	
Development	Physical	Emotional	Analytical	
Grammar M	lore Proper N	ouns		
Common Nouns				
	Subject	Obiect	Predicate	

200. Other races as well endowed as the white.—These racial characteristics are all facts in nature, and they make certain things easier and others more difficult, for the man; but they cannot possibly determine all that a man is. That is why Shylock asked if a Jew hath no feelings. It has been proved that the most notable of human virtues are richly represented among the Esquimaux. who eat raw flesh. The Negro and Kafir are not generally credited with the same virtues but it must be remembered that till very lately they were regarded as goods and chattel, and the prejudice against them in the eyes of their erst-while "masters" is not easy to wipe out. If the races are real Types and not mere milestones on the path of evolution, it is not improbable that the Negroes are not the links between the Ape and the White man, as once people supposed, but only the remnants of a once-glorious but dark-skinned race, who could

perhaps boast of a civilization as good as our own, at least in some respects.

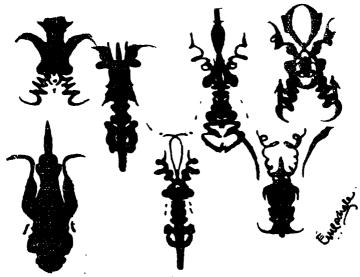
201. Better bodies greater responsibilities: If we accept the theory that the body is a vesture for the immortal spirit within, a machine through which he works, the body will certainly help or hinder the Inner man. Bodies of different races would be like various musical instruments in different states of repair. The best musician will not be able to get exactly the same notes out of each, and even he will find it difficult to get much out of them, if you insist on his putting on a pair of wicketkeeper's gloves. But a Tansen or Beethoven will always do better than others. A musician who can get tolerable music out of a broken violin deserves more credit than another who does equally well with a new one, in perfect tune. Race does exist and yet racial pride would seem to be no better than the satisfaction one might legitimately feel in having a better violin. At the same time, we have obtained this instrument by the mere accident of birth in a certain family. The better the race I am born in, the less credit do I deserve; and my blue blood only brings with it bigger responsibilities. Being born of a particular set of noble parents. I must utilise the facilities, that my body and my environment (which perhaps affects me more) give me, to help other men who are not equally fortunate. If I do succeed in making their burden a little lighter, they might in their turn, show their

appreciation of it. It will show that even with inferior bodies they are capable of expressing gratitude: but that is their affair. If the Englishman considers himself superior to Indians in some respects — as he undoubtedly is — it adds to his responsibilities. But it is not for a Britisher to expound the great things that he has done in India. That is the Indian's business. We have done it in the past and will do it again. But racial pride has caught hold of us so firmly that the best of us find it difficult not to talk of the glorious deeds of our race. This sort of thing has done immense harm in the past and that is why in trying to study man, it is necessary at the very outset to understand that the rise and the growth of different races of mankind is a very interesting subject well worthy of our attention, but instead of teaching us to be proud of our instrument, it ought to direct our, attention to the musician within.

202. Symmetry of form—a great fact:—In addition to the racial characteristics, another thing which strikes us in our look at a man is the symmetry of his form. This is a great feature of all animal life and yet we do not sufficiently appreciate this great fact. We are so accustomed to see two hands, two feet and two ears, that we are apt to see nothing wonderful in it. "Nature abhors a vacuum" is no longer a sufficient explanation; but we seem to be content to accept a dictum that

"Nature likes symmetry, and balance". We know how difficult it is to draw a simple geometrical fig ure symmetrical about one axis without the aid of special instruments; and yet, wherever we look, we see nature giving us a multitude of mirror-images of solid objects. How does She manage this miracle?

203. Explained by rotation-fourth dimension:—If we think about it, we shall see that duplication or mirror images of plane figures are very difficult, so long as we confine ourselves to that plane only: and in all our instruments for drawing symmetrical figures, we have to have recourse to a third dimension. Thus with a compass we take an axis at right angles to the plane and make a point rotate about it to get a circle. If we take any plane figure and rotate it round any axis. lying in that plane through 180°, we get its mirrorimage. Diagram shows a plane signature and the effect of doubling the paper, while the ink is wet. All the beautiful symmetrical figures were obtained by folding the paper and the reader can amuse himself for quite a time by preparing similar designs. A symmetrical figure on a plane surface (having only two dimensions, length and breadth) is very easy for a person who is able to work in three dimensions. All he has to do is to rotate the figure in the third dimension. Why should we have only three dimensions in nature and not four, is a question difficult to settle; but if we assume for a moment that we have Beings who are conscious of and can work in four dimensions, it would be mere child's play for them to turn our right hand into the left hand by rotating it round a plane. They will only be doing in substance what a mirror does in appearance, May it not be that all the three dimensional symmetry that is so universally characteristic of animal organisms is only the result of such a rotation and hence an evidence of the physical existence of a four dimensional world? This is rather a difficult subject to grasp, but is very interesting all the same, and we shall again revert to it later; but we might note here that it supplies us with a logical explanation of a universal phenomenon; and it does not seem absurd to investigate it further.



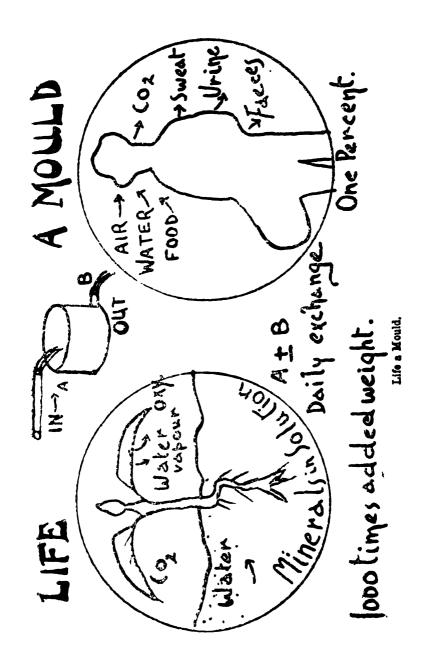
Symmetry, in nature.

XIX. A Chemist and Biologist looks at Life

204. All Life but a mould: Whatever the outer appearance that strikes the eye, the man we see in front of us is but a mould through which matter flows in and out constantly. As a baby grows into a young man it retains the characteristic shape, which bears the name we give the baby, and its size for the time being makes no difference. Even if the child should happen to have an arm or a leg cut off, it will continue to have the same identity. That is one great characteristic of all living things, and it is that which distinguishes the vegetable, animal or human kingdom from the Mineral. As the Chemist tells us, the whole Universe is a bundle of atoms of various elements and their compounds in a continuous state of flux: but these compounds are comparatively stable in the Mineral kingdom. Even there, the process of weathering is always at Rocks are broken by natural agencies like rain, snow, heat, wind, the action of Plant life; portions are dissolved in one place and deposited in another, and so on. In the Crystaline form Minerals grow by accretions but on the whole at this stage of life, things are in a much more stable and rigid state than in the case of the vegetable and animal kingdoms. Life in a mineral is in a dormant and sleepy condition, and is roused only by the violent impacts which characterise Evolution in the

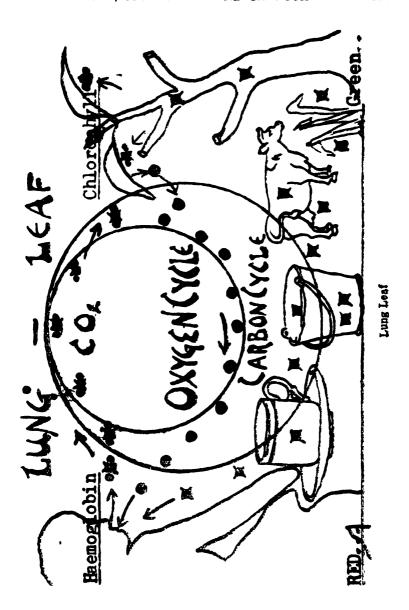
mineral Kingdom. In the two higher Kingdoms the chemical compounds become much more complex, and therefore comparatively more unstable, and so the Living organism becomes only a mould or a pattern where fresh material is taken inside in one form, thrown out in another. All living things vegetable, animal or human are like those cisterns of our younger days, which had a tap A which filled it in a certain number of hours and tap B which could empty it more slowly or more quickly. The problem is to find out how things will happen when both taps are running together. If more water comes in through tap A than B can let out, the cistern begins to fill, or vise versa. A sapling grows into a stately tree adding a fresh ring for every year it lives. A baby grows into a man, and men grow fat or get lean, according to their capacity to assimilate food but the outer form retains its identity.

205. Plants and Animals:— Plants suck in through their root system enormous quantities of water together with various mineral salts in solution, and Carbon-dioxide and Oxygen through the leaves, out of which the whole tree is built up. The Water which brings in the salts plays a very important part in the life of the tree, and for every pound of solid matter built in, as many as 1000 pounds of water have to be passed through. Animals take into their system the minerals required in the form of food and drink through the mouth, and



air through the nose: and throw out what they do not want—their waste products in the form of breath, sweat, urine and faeces; and it is interesting to note that a man replaces about one percent of his body every day, not to speak of a good deal of water that we pass through our sweatglands in hot climates. We have for every square inch of our skin as many as 3500 of these convoluted tubes, each say a quarter of an inch in length. Taking an average of 28000 glands to the sq. inch and a skin surface of 2500 square inches, the length of tubing works out to 28 miles on one man's body. Through these tinv tubes we exude from one to four pounds of water—as perspiration, which not only takes out of our system salts not required in the body, but while evaporating cools the skin as well. All we have to do is to drink the quantity of water reauired.

206. Man, only water and charcoal:— A Chemist tells us that man like everything else in nature is, whether he is a beggar in the streets, or a Grand Commander of the Star of India, a hundred-weight of water, a small bag of charcoal, enough lime to make a bucket of white-wash, phosphorus which will suffice to tip 2200 matches, a spoonful of magnesia, sulphur with which to make a little oint-ment, and iron from which we can make a two inch nail, and a few more things—the whole material man being worth not more than two



rupees at market rates. And to maintain the outer form, in thirty years time he has to eat:

Rice	•••	100 maunds
Wheat	•••	42 maunds
Pulses	•••	36 maunds
Oils and fats	•••	17 maunds
Milk	•••	15 maunds
Sugar	•••	10 maunds
Fruit & vegetables		26 maunds
Leafy vegetables		50 maunds

and drink four hundred and fifty buckets of water. This is for those who eat to live. Those who live to eat consume much more. And yet if you give the Chemist all these things and more, he can not make of them even an amœba or a flea, far less a man. Living beings no doubt consist of so much Carbon and Hydrogen, but these Elements are, by some mysterious process called "Life," built up into such a complex structure, that it defies all imitation. Thus a Molecule of Hæmoglobin from the blood of a horse is made up of C(712) H (1130) N (214) S(2) Fe (1) 0 (245) a total of 2304 Atoms making up one Molecule which

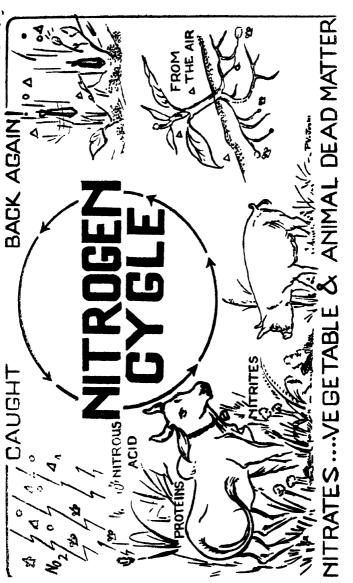


Man's Food

contains one atom of iron and one only. and this one atom is as essential as the key-stone of an arch. Take away that one unit and the whole structure will fly to pieces. Obviously there is some Design in the making up of even such a Molecule; and it is hardly logical to call it all a "fortuitous concourse of atoms."

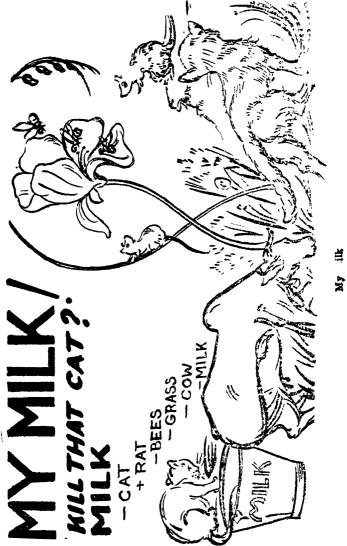
207. Not even these our personal property:— Another curious thing about life is that although a living being consists of so many elements, none of them are so to say, in its sole possession. The Carbon particles which are running through my blood this moment will soon be floating in the air, and their place will be taken by others. There is a regular cycle through which each of the Element wanders over the earth. For instance Nitrogen which forms nearly eighty percent of our atmosphere is a very inert gas, and will not combine with which forms 20 percent of our air, although the two gases are being constantly mixed up together. When there is a flash of lightening an atom of Nitrogen suddenly seems to lose its head and catches hold of not one but two atoms of Oxygen and forms NO, gas. This is dissolved by the rain-water and gets converted into nitrous and nitric Acid, forming Nitrates with the nearest alkali available. The nodules near the root-tips of certain plants have also the property of fixing

Nitrogen from the air, thus making it available for



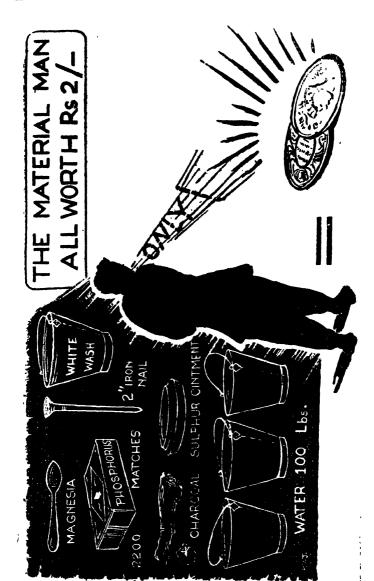
Nitrogen Cycle

plants. The same Nitrogen molecules that make up a blade of grass get into a cow a few minutes later. Next day they enter the milk, and will be found in my body or yours the day after, where they may stay for some time, or go out to a manure heap, to become a blade of grass again. Once caught, this inert gas has to go round and round its Sansar—wheel of birth and death, until it is released from bondage, in the explosion of a bomb or a cracker, or when organic matter is burnt. Thus there is a regular Nitrogen-cycle. All matter circulates round and round in a similar manner and at no time can a set of molecules be looked upon as the peculiar property of one man. That bundle of matter, which a man or a woman admires in a mirror every day is not his or her own. He or she, in fact every living creature, is a mere mould in which fresh particles of matter come in every moment, where they play about a bit by forming new combinations, and pass on. It is only the framework that persists, as it does in an institution like a School or a College, where students enter at one end and pass out at the other, where the entire staff may be changed in a few year's time, and where the very buildings may be pulled down and rebuilt on another site. And yet, the school remains the same. Similarly the Karachi or Bombay of 1931 is by no means the same that it was fifty years ago. Possibly none of the people who lived in these cities then are now alive. Streets and buildings have



changed beyond recognition, and still Karachi or Bombay exists, same as you and I. That is an essential characteristic of life.

208. Who chains them together? What keeps all these particles together, and why so only until that particular moment called death, from which instant all molecules begin to fly off at a tangent and dust returns unto dust? What is the nature of life that breathes on this dust and makes it alive? We frankly do not know, and yet it is a fact, which ought to make us pause, one on which we may ponder a bit, instead of laughing it away. When a man dies, there is at least no visible tie that is broken asunder: but there is no doubt, that something which holds these particles together during life seems to snap at death. What can it be? Here again it is interesting to revert to our conception of the possibility of a fourth dimension. have all seen Meyer's magnetic needles, which freely floating on water arrange themselves into perfectly regular geometrical shapes, if a powerful magnet is held above them. If the magnet is shifted to a distance the needles all fly away. The magnet never was visible in the two dimensional world in which the needles float, and its movement can only be inferred by the confusion in which the needles seem to fall. In the absence of any better explanation, is it foolish to assume for a moment that perhaps it is something like a magnet acting in



a dimension higher than our solid world, that holds all these elements together? And if that magnet is the real cause of all the phenomena in this world, the cause will naturally survive death, although it may cease to show any effect in this three-dimensioned world of ours. This is of course a speculation, but well worthy of a moment's thought.

209. Animal life depends upon vegetation:—

We have seen how the particles of matter are the common property not only of the animals, but vegetable life as well; and it is interesting to notice how their activities and needs are complementary. Thus carbon is an element perfectly insoluble in water, acids, or alkalies, and so no animal can take it in that form. But it readily combines with oxygen and forms CO₂ a gas, which again animals can make no use of and which in fact acts as a poison to them. Here comes in the vegetable world, in which the green scum in the leaves has the power of decomposing this CO2 into oxygen and carbon in the presence of Sunlight. It is only in this manner that plants succeed in catching carbon and once thus entangled in the meshes of life, it is passed on to the animals, in a form in which they can make use of it. But this carbon is only lent to the animal kingdom, and has to be returned to the plants. That is done through the agency of another red scum, which carries back the bereaved oxygen to the carbon in our body. The carbon meets its long

lost spouse and CO₂ is again formed and thrown out into the air, to float merrily until required by plants again. Thus plants and animals keep the cycle going not only in the case of carbon, but of nitrogen and other elements as well. Does this look like a mere fortuitous concourse or an ordered whole, where all matter is the common property of all life, animal and vegetable? And if our very flesh is not really our own property, what justification can we have for considering ourselves superior to others? Every form of life, every creature, every man is essentially the equal of another and ought to be treated as such. If the very particles of which I am composed were vesterday the property of another individual, and will pass on to some one else tomorrow, all snobbery whether based on race, caste. colour, sex or religion would appear to be only foolish.

210. The Web of Life:— Not only is the vegetable kingdom as a whole thus essential to the very existence of the animal kingdom, but all the orders, genera, species and the countless varieties of both the flora and the fauna are so dependent on each other that there is a definite and delicate balance between them. It was Darwin who first told the "cats and clover" story which soon went round the world. Round a hundred heads of, purple clover he tied fine muslin bags, which admitted sunlight and air to them, but no insects. Not one

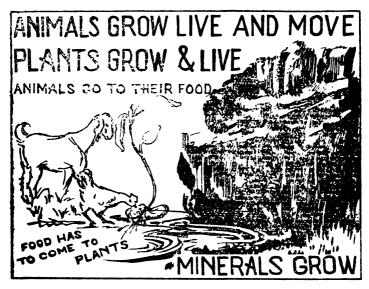
seed could be got from them, from another set of 100 heads he got as many as 27000 seeds, because these flowers could be visited by bumble bees which effect their cross fertilisation. More seeds scattered meant a better clover crop for the next year. He thus proved that the yield of clover in any year depended upon the number of bumble bees in the previous season. Now field-mice are known to be very fond of these bees, and so the bees declined where the rats thrived. In the neighbourhood of villages, cats keep down the number of rats, and thus help the growth of clover. Better pasture means more cows and more milk. When a cat drinks some of "my milk" as it does occasionally, I naturally feel aggrieved but Darwin showed us that even the cat had its humble share in the production of milk, and had really earned the little milk it took from us. Gilbert White first pointed out the great part that earthworms have played in the formation of loose soil which supports all our vegetation: but it was Darwin who in his remarkable book on the subject, brought out clearly what a debt we owe to these humble and almost despicable creatures, of whom there are 53000 in an acre of land. On an average they pass ten tons of soil through their bodies in a year and they have been doing this for millions of years. They burrow through the soil leaving holes through which rain water can go in and roots penetrate the soil, and the castings they leave on the surface are enough to give a three inch layer over the whole surface in fifteen years. Every worm and insect has its use and yet if the birds were not there to keep down their number to a reasonable limit, they would overrun the earth and make all vegetation impossible in ten years time, only to perish themselves through the accumulation of Carbon-dioxide as we have seen. This is a very fascinating study, but as we are confining our attention to Man for the present we must leave it here, only noting that we have irrefutable evidence that "No creature lives or dies to itself; that each life is linked to other lives, often in obscure and unsuspected ways" The whole creation is tied together in what is called "THE WEB of LIFE."

XX. A Machine that Grows

211. Man the machine:—In our cursorv look at a man in the last chapter, we saw how the colour of his skin is after all not of great importance. Race differences do exist, but they cannot wholly determine the nature of the Inner man. They can only help or hinder. In fact they confer no privileges, but impose responsibilities. Blue blood demands better behaviour. We noticed the symmetry of form in man and all other animals; and I tried to show how the physical existence of a fourth dimension would make this easy. From a chemical point of view man is but a bundle of charcoal and water, together with a few other substances thrown in; and Life only holds them together in a pattern where matter flows in at one end, and goes out at the other. How does IT manage that? again, even the carbon and nitrogen inside a man are not his peculiar possession. We have seen that no animal life would be possible without vegetables and we have also tried to realise how the whole creation is interlinked into "One WEB of LIFE" in which each lives for all and all live for each. The word Independence does not exist in Nature. It is all Interdependence.

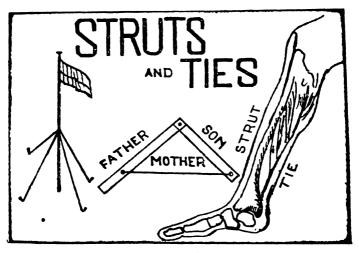
All matter is the common property of all life, and all individuals are essentially one, and equal.

These are the things we learnt by looking at man the machine, as a whole; and we shall now try to study the structure of his body,



212. In nature we recognise three kingdoms-mineral, vegetable, and animal. Crystals from minerals can grow, vegetables live and grow, animals live, grow and move. The manner in which growth takes place in man and how life affects it, we shall consider later; but before we do that, it is advisable to form an idea of the general framework of man's body. Both plants and animals have to withstand the onslaught of natural forces—wind, rain, heat, etc., but the former do not shift their :position. They have therefore anchored

themselves firmly in one place, and arrange all their affairs from that point of view. They are like a steam engine, fixed on solid foundations in a mill. whereas animals are like locomotives which go from place to place and have to be self-contained. Plants therefore have a set of roots, which go into the ground, and a trunk which shoots up into the air, with foliage on top, all built to resist any attempts to dislodge them. Plants do not eat but take their nourishment only in a liquid form, for which purpose they have a thousand mouths in their root tips, with which they grope about in the bowels of the earth. They breathe through a thousand noses. in their leaves. As an animal can quickly move from place to place, only one mouth and one nose serve his purpose. But the whole structure of his body has to be altered to enable him to do so.



Struts and ties.

213. We have all seen how a tent rears up its head, with a stiff pole in the centre, and thin flexible ropes on all sides. That is how our bodies. in fact all structures in nature, are builted with one set of rigid members, which can stand a lot of pushing without being crushed and another set of fibres which, soft as they are, will allow themselves to be pulled a great deal before they snap. These two, called struts and ties in engineering parlance, have quite different and seemingly opposite functions: but one cannot act without the other. For instance in a beam supported on two walls, the fibres in the upper half act as a strut and the lower fibres tie them together, by firmly adhering to them. In a reinforced concrete beam therefore we put in iron rods in the lower portion of the beam to take up the tension and leave the concrete on top (which however has to be properly tied to the iron below) to take the compression.

Like a hard, unbending man and a loving, accommodating woman, they make up mutual deficiencies, and keep together the whole family. That is not a question of sex but of gender, and sometimes it is the wife's turn, to be the real prop of the family. In such cases in the Sanskrit language she is called "Dārā"—still meaning a wife—but a word declined in the masculine gender. It is interesting to note that a real womanly wife is considered feminine, as she should be, while a sixth

or seventh wife, who is neither here nor there is called



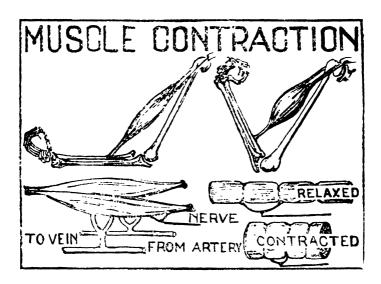
"Kalatra," and declined in the neuter gender. We do have such neutral objects and people in nature, but they do not count in any structure. Our bodies are thus formed with a number of hard, stiff bones, kept together by thin flexible ropes called muscles.

214. The bony skeleton :— There are 238 such bones in a man's body, kept together by 1400 sets of muscles. The bones are of various shapes and sizes, perfectly fitted together, and a glance at Diagram will show how wonderfully they are suited to the duties required of them. Notice the arch in the step which together

with the muscles tying it up, serves as an elastic

spring to absorb shocks inevitable in walking. Had it not been for the two bones in the lower leg or the forearm, we would find it very difficult to turn them round. The hard knee-cap shields the joint from possible injury. The bent upper head of the thigh bone, in which every fibre has been given the shape, thickness and position which ensures the greatest strength with the greatest economy of material, is a marvel of engineering skill. The balland-socket joint enables us to move our legs and arms quite freely without interfering with transmission of the load. The hip-bones form a wide pan, to support the intestines, and in the case of women. the womb as well. The backbone, made up of a number of perforated bony discs, gives us a flexible and perfectly protected conduit for our telegraph cables, which we shall speak of later. The open basket work of the ribs allows of the free expansion and contraction of our lungs. The topmost two discs in the backbone are shaped like cymbals permit of movement both sideways and up and down; and yet these are so pierced that our telegraph wires can pass through them undisturbed. uppermost of these discs is called the Atlas on whose shoulders is delicately balanced the hard jewel box, in which our brain, the most valuable of our possessions, is kept freely floating in an oil bath. Last, if not the least, would come our jaws—the grinding mill, which enables us to pound up our food. All these form the body scaffolding of our

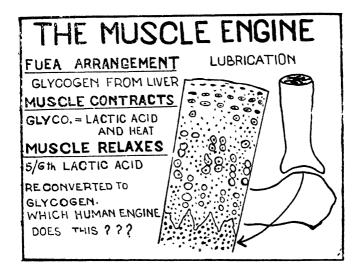
house or the temple as some choose to call it, in which the Inner man lives.



215. Fourteen hundred muscles not only bind together all these bones, but they are the engines which move them. A muscle fibre is so thin that 500 of these have to be put side by side to make up one inch, but it may be an inch or more in length. They all lie together in bundles which are enclosed in transparent sheaths and act as one. Each muscle fibre is made up of dark-looking discs separated from each other by clear spaces, like a pile of copper and silver coins placed alternately. These discs are charged with a fuel called glycogen derived from blood and to each is joined the end of a nerve. When an impulse arrives along this nerve, the glycogen seems

to explode into lactic acid. The discs become thinner and wider, and the muscle contracts. The chemical change sets free energy which can be turned into work, and thus we can lift weights. The whole action is like that of a motor car engine. fired by the electric spark with the one difference that lactic acid which is the waste product is not thrown out at once. Five-sixth of it is slowly reconverted into the fuel glycogen—a feat which no motor engineer has yet been able to perform. At a time, only one-sixth of the fuel gets burnt up and this supplies the heat required by the body. The usual products of combustion—water and carbondioxide are carried away by the blood. These little discs thus act like engine cylinders. In a welldeveloped biceps of a working man there are 600,000 of these; and yet all these respond to a stimulus instantaneously. The 1400 muscles with their myriads of microscopic cylinders, firing at appropriate moments, not only hold together the bony skeleton, but move it from place to place and also enable men to do mechanical work. delicately mutual movements have to be so timed and balanced that it is not surprising that a child takes a little time to learn to walk. Our bones muscles are certainly not a fortuitous concourse.

216. A perfect lubricating system:—Every movement naturally involves rubbing of one



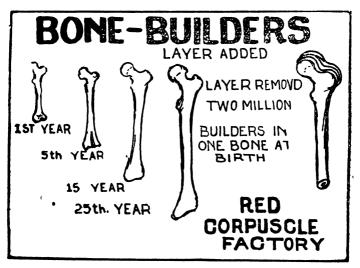
bone against another and that means friction. Total removal of friction is impossible, but the problem of minimising it has taxed the ingenuity of designers of all kinds of machinery. The only way known is to interpose a thin film of oil between the two rubbing surfaces. But the difficulty is to keep that layer of oil in its place. The pressure between the moving parts tends to squeeze the out and the tendency is the most pronounced where the pressure is greatest, that is, where lubrication is required most. The oil, moreover decomposes owing to the heat produced at the joint. The only way of achieving this end is to force a fresh quantity of oil in each bearing every few minutes, or to let all the moving parts move in an oil bath and trust to chance

to change the film between the rubbing surfaces. That is the best that man has been able to do. Let us see how man's Maker has solved the problem of lubricating 230 joints in the human body. Here the two rubbing surfaces are covered with a thin layer of a tough and smooth substance called cartilage, which is elastic and serves as a buffer. When the two cartilages rub against each other the cells on the surface get loose, and become soft and slippery-and provide the necessary oil-film. All joints are completetly enclosed by flaccid membranes, and there is no wastage of oil. The greater the rubbing the more copious the oil supply, as it should be; and yet no drain pipe is necessary to carry away the excess oil, as this is reabsorbed and returned to the blood. Thus are we provided with a perfect system of lubrication which is entirely self-adjusting, and economical. When it breaks down, as it sometimes does in old age, we get rheumatism; and the joints seize. But that happens only when we disregard other laws of health.

217. The machine that grows:—Another great feature of the human machine is that unlike man-made machines, it grows in size. Beginning with two microscopic cells from the body of the mother and father, which fuse into one, it grows into a complicated machine weighing a hundred pounds in twenty years' time. During the first nine months, the one cell multiplies a thousand-

fold, and differentiates into the bones, muscles, nerves, skin, hair, nails, etc. each in its appropriate place. How, all this great variety of structure is built out of one blood-stream from the mother, is a marvel in itselelf, but at any rate, this growth takes place in a sheltered place, in the comparative seclusion of the womb. But after birth, it still grows tenfold, while performing its duties in the world. Have we ever heard of a two-seater motor car growing into a five-seater as the owner's family increases. or of a doll's house expanding to a fullsized cottage. because the girl who played the mother has become a real mother with dolls of flesh and blood?

218. The cottage which expands into a palace:—And yet that is what is happening to every human body—the wonderful house in which we all



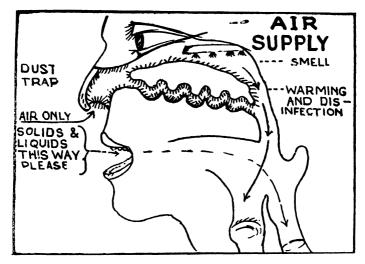
live. While we eat and sleep in it, the very walls increase in height, and the roof expands, the beams get larger, and thicker, and the whole room grows bigger. To take just one example, the thigh-bone in a child is about 4 inches in length at birth. Only the shaft is made up of bone, formed not as a solid but as a hollow pillar, the ends being soft cartilage. The soft tissue is gradually replaced by hard bone. Fresh layers are added on the upper surface on the neck while material is cut away from its lower surface; and so the bone increases proportionately in all places. The muscles connecting it with other bones as well as the blood vessels, nerves etc have all to keep pace—a fact which our budding Sandows might keep in mind. Muscles cannot grow without adequate blood supply. Given that, the whole thigh grows to four times its size in 20 years. mated that about two million bone-builders are engaged in the construction of that one thigh-bone of a newly born child and by the time their task is completed, an army of one hundred and fity millions is employed on the job. Nor is this army demobilised when the work is over: it is maintained as a standing army to look after the works and to effect repairs, in case the bone should get broken. That is one bone, and there are 238 of these, not to speak of other tissues equally important. Thus does our cottage expand into a palace, while we are in occupation all the time. We do not need "Road closed" boards

219 Living things grow from within:—This growth in the bodies of living creatures, moreover, takes place not by addition from outside, but multiplication from within. A crystal grows by accretion. a wall is raised by heaping up more bricks; but in our bodies, each brick some how expands into bricks. It is not merely a question of imbibing watery nourishment by osmosis. Cells do not divide like the frog who wanted to imitate a bullock. That would only result in the bursting of a cell wall. Every cell division is presaged by a splitting up of its centrosome, round which the chromsomes rearrange themselves and the two new cells are an exact replica of the original cell. The "urge to divide" that overtakes a cell is something quite different from the pumping of a football. It is certainly not the result of liquid or gaseous pressure. Ten millions of living cells can be accommodated on the surface of a coin: and yet a single one of these has in it the potentiality of life, and when the inner "urge" comes on it, it can blossom into a Banyan, a Baboon, or a Birkenhead. This "urge" is no doubt akin to pressure. but it is not one that originates in three dimensional space. Life is essentially a phenomenon of fourdimensional space, and it is only when we accept this simple fact that we shall understand, this sex urge this will to multiply. We have already seen how it is not unreasonable to assume that a force from the fourth dimension keeps together our bodies, like the magnet round which Meyer's needles group themselves; and if a small piece were to break away from this magnet, should it surprise us if it carries away with it a few of the needles, and starts a system of its own? Does not the division of the centrosome, which is but the focus through which the vital currents flow in, point to this conclusion? Living things thus grow from within, and so does the house in which all human beings live and move about.

XXI Running The Machine or Is it A Huge City.

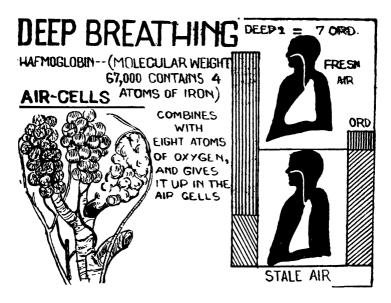
- 220. Our body a huge city:—The human body is a complicated machine. It grows, as we have just seen, and building materials have to be supplied for the purpose and transported to all parts of the body. It does mechanical work which means expenditure of energy which has to be made good. Like all machines its parts are subject to wear and tear, and this has to be replaced. We likened our machine to a house, but if we consider the enormous variety of structures within the body, and the fabulous number of inhabitants that live in it, we shall see that a city would be a more appropriate Our body has been so described by many poets of old, and it is a very good simile if we do not carry it too far. The business carried on in a modern town can give us a very good idea of the problems that confront our Maker, in designing our bodies, nay even those of tiny ants. It is interesting to see how He has solved them.
- 221 The air-supply system:—This wonder-ful city of ours is surrounded by a wall on all sides having only one gate, through which solids and liquids can go in, with a wicket-gate by the side, for gaseous visitors. There is no other entrance, and even when we get completely drenched by rain, not a drop of water can get in except through the

mouth or the nose. Both these passages are well-



guarded. Even solids and liquids give off gases and these go in advance through the wicket-gate. Their credentials are there examined by Mr. Smell and if found unwelcome, they are either thrown out or killed, and orders are issued to the doorkeeper not to admit the main party. Not a particle of air is allowed to go in without being carefully searched in the winding passages in the nose All dust is kept out. If the air is too cold, it is warmed, and if too dry, it is moistened. Any disease germs trying to smuggle through are killed on the spot by a disinfectant, which is specially manufactured in a factory nearby. And so when we are in good health only wholesome gases are allowed to go in through the nose. This arrangement for dealing

with gaseous intruders does not exist in the mouth which is meant for solids and liquids only, and hence the great value of breathing through the nose.

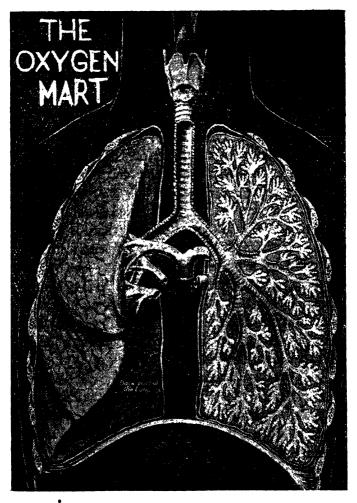


222. Deep Breathing:—The Air that is thus admitted through the nose, has about eighty percent of Nitrogen in it together with about twenty percent of Oxygen, some Carbon-dioxide, and small amounts of other rare gases. The Nitrogen serves only to dilute the Oxygen of which large quantities ar necessary to maintain Life. The Lungs which sunk in and throw out the air verily serve as the Oxygen, Market of this City. Our Lungs have on an average, 3000 cubic centimeters, of air

in them and we ordinarily take in another 500 c. c. The fresh air gets mixed with the air inside the lungs and we throw out the extra 500 c. c. when we breathe out. With a little effort we can expand our lungs to 5500 c. c. s. and contract them to about 1500 c. c. s. The ordinary breath is thus 3000 to 3500 c. c. and back, whereas a deep breath is like 1500 c. c. expanding to 5500 c. c. and back and so results in very much more business in Oxygen. When we exert ourselves we begin to breathe heavily and more quickly to make up for the Oxygen we use up. We get out of breath, a few Deep breaths will enable us to recover quickly. (one deep breath being equivalent to seven ordinary ones). Therein lies the value of deep breathing, a habit which is well worth cultivating. Only it should never be done unless we are sure that the air we breathe is pure fresh air in the open.

223. The Oxygen market:—The area available in an ordinary man's lungs for the exchange of Oxygen is 100 square feet—something amazing. The Oxygen is there packed in flat circular, coinlike boxes—the Red corpuscles, of which there are four millions in a cubic centimeter of our blood. These boxes come to the market as in venous blood filled with Carbon-dioxide tinged blue. The Carbon-dioxide is exchanged for the oxygen in the lungs, the colour changes to bright red, and the the blood thus enriched is pumped back into our

arteries to all parts of the body. The carbon-dioxide

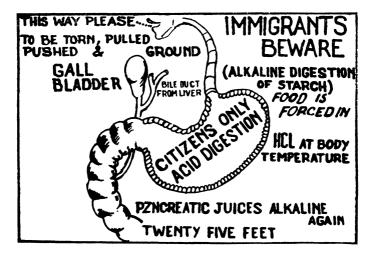


is thrown out into the air for benefit of plants as we have seen before. The particles of nitrogen are no

more than the people who go to market-place just to see the fun. Practically all the business done is in oxygen and the *Vitality Globules* of which we take in about sixteen cubic feet every day. To produce the Carbon-dioxide thrown out daily, we would need to burn eight ounces of charcoal. So works the Oxygen—Market of our City.

224. The Ivory Gate:— In our body there are no arrangements for transport of solids except in a pulpy semi-liquid condition; and so, as soon as any solids enter the ivory gate, they are caught hold of by the gate keeper, and pushed under a set of choppers and crushers. On their head is poured a liquid prepared in numerous adjacent factories, to which a message had already been sent by the advance guards from the nose. This fluid not only helps to get the solids into a condition in which they can be pushed along, but induces chemical changes as well. It converts the starch into sugar. and that is why dry bread if properly chewed and mixed with saliva tastes sweet. The gate-keeper not only pushes the visitor hither and thither but at the same time his daughter Miss Taste examines them to make sure that they will not do any harm to the body if they are allowed to go in. Generally she does her work fairly well, and persons, not approved of by her, are at once thrown out of the gate. But after all, like other young girls, she has her own likes and dislikes and she sometimes

smuggles in her own friends, who might prove troublesome inside the city. In such cases, under instructions from a higher authority, she is compelled to admit and even to make friends with persons like Miss Castor oil and Mr. Quinine for whom she has a positive aversion. If only this gate-keeper and his daughter were properly trained a great deal of misery in the world could be avoided.



225. A broad-way for the immigrants:—The gateway opens on to a broad thoroughfare passing right through the city. This is meant more for immigrants than for stray tourists. There are instances of idle spectators like ironscrews going right through, but generally admission is on business only. That is why all visitors are thus

examined, tasted and only such as are likely to prove useful citizens are allowed to come in. One quality demanded of them is that they should be willing to cooperate with others for common good and we have just seen how they are rather roughly handled at the gate to make sure of this. Only the tractable who are willing to mix with Saliva are carried along the road which is over twenty five feet in length and winds round and round through the city. With the exception of the short passage leading to the oxygen market, our city has only one such road. All traffic along this is in one direction only, except when it is easier to eject a nasty intruder through the entrance. The avenue is lined on both sides by many factories, which dump their products at intervals and by markets where a great deal of business is done. Every variety of inducement is offered to the visitors, by alkalies, acids and the like, and they are encouraged to settle down in the city. As in London streets, loitering is not permitted, and every one has to "move on."

226. The garden party in the park:—After the food passes the gate, it has to jump across the air avenue, which is temporarialy closed by a flap. No solids and liquids are allowed on that avenue, and every particle trying to get in is summarily ejected after spluttering and coughing. Once the immigrants pass that crossing they are led

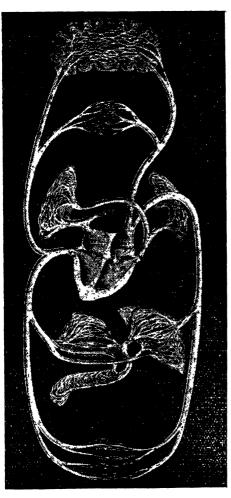
along a broad straight length up to the second portal, which readily opens to admit visitors to the stomach. This is like a huge park where at a garden-party all the new-comers get an opportunity of intimately mixing with each other, and with the house-party. We have already seen how the maidens from the Ptyalin tribe, with their alkaline blue saris, accompanied them from the first gate; and they are now joined by damsels from the Pepsin family with their acid-red robes, who pour in large numbers from their adjoining chambers. The acid robes are manufactured in adjacent factories common salt, at the temperature of the body—a feat which no human chemist has yet succeeded in performing. Thus clothed the Pepsin girls are irresistible, and many Proteins succumb to their charms, and all these married couples pass out by side streets to look out for a house. Alcohol is another pushing gentleman who enters our city in like manner; but a great majority of the immigrants naturally hesitate and all these, after a reasonable stay in the stomach are gently but firmly led along through the third portal. This gate is situated at the small end of an inverted funnel and opens at intervals. If lumps of solid food reach this valve closes lightly until the undigested lumps are squeezed bcak into the park. Once they pass this third gate they are not allowed to return under any circumstances, and must pass

on through the winding labyrinth to the only exit at the other end.

227. The narrow winding road:—As the balance of the immigrants pass along this road they are further joined by Trypsin lasses, who are the cousins of the Pepsin family, but with blue blouses and they carry the proteins by storm. There are also some relations of the Ptvalins who sweeten the life of the starches: and then there are girls from a family who like to marry fat people. So what with one attraction or another. provided in the park or the billious atmosphere of the narrow streets, most of the immigrants take the plunge, and decide to settle down, when they are taken to the citizen's schools, and thence to the employment bureau. Unless there is something wrong with the Pepsin, Trypsin and other families who act as hosts, very few guests leave our city. Even these are led on to a large waiting hall, where another attempt is made to induce them to stay. Only then, are they allowed to go out through the fourth door, along with the sweepings from the long road. Thus is immigration into our city controlled, by a very efficient department.

228. Underground for citizens only Passes

by :---



The Royal Palace: The Secretariat: Radio and telegraph; (The Brain) The Workshop—(Hands) The Pumping Station-(The Heart) The Oxygen Mart (Lungs) The Immigration Depot-(The Stomach) Fuel Depot-(The Liver) Chemicals Ltd. Post Offices-(Ductless glands) Drainage-(Kidneys) Transport— (Feet)

In addition to this road for strangers, we have in our city a perfect water-carriage system, meant

only for citizens. It enables them to get round the city very quickly, as in tube railways; only much more efficiently. If the London Underground can run thirty trains an hour, we have a continuous service by which a citizen can travel round the whole city thirty times during the same period. The stream is maintained by a powerful pump equipped with uptodate valves, which pushes the blood along elastic pressure pipes. These are also provided with flaps which open only in one direction, so that there is only a one-way traffic. service reaches the extreme ends of the city, and pierces the narrowest, labyrinths. It carries not only the citizens, but merchandise as well, of which the most important are the oxygen boxes. vital gas is carried to parts wherever it is required, and the cases now filled with CO, and other wastes are brought back along another road to a second pump, which sends them to the oxygen market for refilling. From the market they come back to the first pump, to go the round again. On the way the stream passes through the kidneys, where all nitrogenous waste is removed.

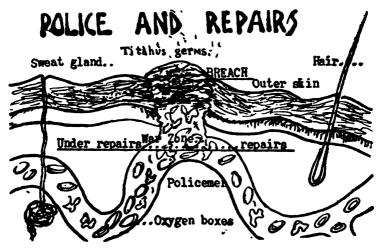
229. The blood stream not only carries with it everything that is likely to be required in the remotest corners of the city, but it provides perfect police and postal arrangements as well. Not the least curious are the set of workmen of Fibrin tamily who have orders to close breaches in the stream.

They wander all over the body for days and



days, with nothing to do, but perfectly vigilant.

Make the smallest puncture in the walls and



they at once put up the "road closed" boards, spread their fibrous nets, in which thousands of oxygen boxes get entangled, and thus stop the breach. In the meantime a message has already gone to the police station, and hundreds of white cells (of which we have 7000 in a drop of blood) -our tiny policemen—rush to the spot to fight any intruders that might try to get into the closed city through the breach. We can help in this by covering the wound at once with an antiseptic screen through which unwelcome people cannot get in, but once they go in they have to be dealt with by the local police only. Often the battle wages furious. The police are unable to cope with the intruders. Traffic has to be speeded up and the pump beats faster, giving the peculiar throbbing sensation we all

associate with bad wounds. There is a feverish haste all over. Millions of policemen die in the war, forming the yellow pus, but their place is taken by others. In the meantime, masons work under cover, and at last the breach is closed. Unlike our cities, in our body, policemen are born, not recruited indiscriminately, and so to police stations are attached huge maternity homes and training schools; and there are a number of white corpuscles ready for any emergency. In times of war their very birthrate increases rapidly.

230. Postal arrangements:— No less wonderful are the Postal arrangements. We have seen how urgent matters like bleeding and wounds are dealt with at once; but there are often adjustments which can sefely be made in a few days. We have to eat every day to make good the waste we are throwing out constantly; but life does not get extinct if a man does not eat for a few days. We always have a certain amount of reserve inside the body to tide over, and so we might over-eat or starve for some time without endangering our lives. But for the proper functioning of the system we need the various elements within certain limits: and so steps have to be taken to maintain the right proportion by throwing out the excess, or stopping waste. Orders for this purposeare sent out, as by post from various Centres

in the Body known as Ductless Glands. The secretions of some of these Glands — known as Harmones are so potent that one drop a bucket of water is sufficient to start the readjustment, when poured out into the Blood-Thus the Pitutary and Adrenals both stimulate the heart, but in as much as the former increases intestinal activity, it controls growth in general. Fear or anger excite Adrenal secretion, and thus increase capacity for work. To impose physical quietitude, like opening the throttle and putting on brakes at the same time. That is worry which hurts more than work. The Thyroid which is rich in Iodine, and has to be supplied with that elements regulates vitality. The Parathyroid controls the Calcium content, any reduction of which makes a man irritable. So it governs temper and dental health. Insulin helps to regulate the storage of carbohydrates and its conversion into sugar. The Gonads govern the Reproductive system both in men and women: and neither our beards will start growing nor the mammary glands give milk until they get Orders by Post from the Gonads. And thus is the proper balance of the various elements maintained in the Body. All we have to do is to supply the necessary ingredients in the proportion and quantities required, so, as to minimise the strain. That is why a Balanced diet is so important.

ORDERS BY POST



Pineal Gland, Controls

Pitutary (Head post office)
Growth.

Parathyroid... Calcium content.

Thyriod...growth vital processes.

Thymus...White cells.

Adrenals...Blood pressure, fuel supply.

Islets of Langerhans (Insulin)
Sugar content.

Gonads...... Menstruation, Mammary glands etc.

One drop in 2400 buckets of water can act.

231. Truly a wonderful city:—Thus is, our city run. All that we need is taken from outside assimilated and supplied to the various parts of the body as required. Every arrangement is made to keep out unwholesome things and if any injurious substances get in, they are at once sent out. The air is cleaned, warmed, moistened and disinfected before it is allowed to enter. Food—solid and liquid—is

tasted, pounded into pulp, mixed now with alkalies. now with acids and ferments, and all we need extracted out of it. The Blood - stream takes the substances to the remotest corners, and brings back all the refuse. Whatever of this can be repurified is so dealt with, so that wastage is kept down to a minimum. The body-fluids are preserved intact and unpolluted, all germs which enter it being killed, and eaten up by the white cells. soon as the main tubes are ready the Life current is started from the mother's heart, long before the child is born and while its own pumping station is being built. The child's heart then takes up the work from birth, and carries it on faithfully and unceasingly unto death. And all this wonderful machinery springs up from the union of two tiny cells, towards which all matter seems to rush in, and from which the city is built atom by atom. is certainly a concourse, but to call it fortuitous does not appear very rational. It cannot be explained by calling it a mere chemical phonemenon. It certainly is all that, and something much more.

232. Man—the ruler of the city: —We have been studying a typical man, and we have seen how wonderfully he is built. His body is like a huge city, or as it moves, like a modern liner, which is peopled by a very great variety of citizen-cells, who carry on there different avocations, each in his own way. News cells are born, they eat and do their

appointed jobs. They multiply and die, their remains being made use of elsewhere in the city or thrown out. Some of them do not live more than a couple of months: but man, the sum total of their activities, lives on for years. It seems very doubtful whether the tiny cells are at all aware of the existence of our Man, and yet a Man ceases to function as soon as the orderly life of the cells gets deranged. That is one way of looking at it, but is it not equally possible that the real Man acting from a world of his own like the magnet in Meyer's needles', starts a city of cells of his own, for his own purpose? He keeps it together as long as he needs it, but, more often than not, the citizens get into bad habits. They cease to do their work properly. Undesirable immigrants are admitted. Instead of cooperating with each other, some parts get swollen at the expense of others, leading to congestion of traffic, and the whole city gets into such a mess, that the Man in utter despair takes away his controlling hand. There is anarchy. The city is invaded by the ever-present gangs of Vandals whose business is to pull down deserted cities and who attack it with vigour. Dust returneth unto dust. The Real Man goes along his own way, perchance to try again.

233. Our city—one amongst many:—While man is here, he is only one amongst many; and he certainly does not come down only to eat. He has

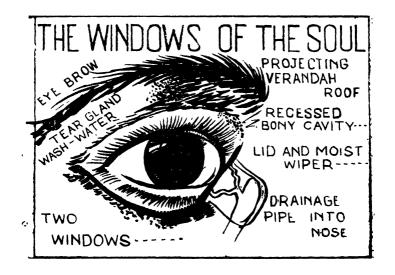
to do so to keep up his body, but he eats to live amongst his peers, to hold inter-course with them. Each man sends out vibrations which are picked up by others, and thus they communicate with each other their ideas, and desires, and then meet them if We have at the outset to realise great fact that individuals know nothing of each other, except through vibrations received. means that all our knowledge depends upon transmitting apparatus, the medium and receiver, and is affected by all these three. inter-position of a thin red or green glass in the medium will make the whole world look red or green; and this ought to teach us not to be too sure of our own impressions. All our vibrations are three dimensional phenomena and we can understand them rightly only by rising into space of a higher dimension. All talk of correctly interpreting phenomena without that vision is futile. But while we are limited to three dimensions, we can of course make the best of it. We cannot order the medium which brings us the vibrations, nor can we adjust the transmitters of other people; but we can at least put our own receivers in better working order. For this purpose we must frist study how they work.

XXII. Our Cities Wireless Receivers and Transmitters

- 234. The cities five wireless receivers.:—At the present stage of evolution every man is fitted with five such receivers. Our ears respond to vibrations in the air and through them we hear what other individuals say. The skin comes in direct contact with other substances and numerous lookout citizens report to the King, what they feel to the touch. Our eyes take in other waves and enable us to see things. The tongue is affected by liquids placed in the mouth, which we taste; and our nose when bombarded by different gases, or fine particles, tells us how they smell. All these five receivers are equipped with necessary telephone wires, which carry their messages to the Inner man; and during our waking life, most of the telephones are ringing all the time. How the man can attend to five telephones or loud-speakers shouting at him all together, and make any sense out of that jumble, passes comprehension; but he performs that feat every moment. Under such conditions mistakes are not unusual, nor need we be surprised at them. On the whole the arrangement works quite well. and that itself is a marvel.
- 235. Their peculiarities:— Two of our receivers—the ears and the eyes—are affected by

vibrations coming from a distance; but the nature of these is quite different. The ear takes in sound waves, which travel only 1100 feet while light waves rush in at a rate of about two hundred thousand miles per second. That is why we see the steam issuing from the whistle of a distant engine long before we hear the squeal, and the lightning flash blinds us before the thunder crashes into our ears. The eye can see only objects coming within a cone of about 45 degrees in front of us; and if we do not want to be bothered by unwelcome sights we can shut off the receiver by closing our eye-lids. The ears are affected by sound waves coming from all directions, and that is why the approach of a motor-car can best be conveyed by a honk. Our three remaining receivers do not respond to vibrations, but have to come in contact with the object themselves. The gases generated in the kitchen, or the vapours given off by the rapidly vanishing lavender water or even solid particles floating from the musk have to enter our nose before we can smell. Our food has to be placed in the mouth in a soluble form. before we can taste it: and we have to get hold of things or bump against them before we can tell weather they are soft or hard to the touch. That is what every child is trying to do when it attempts to catch the moon or puts a shoe into its mouth. It is learning to use its receivers.

236 Man "sees" with his eyes :— Of these receivers, the eye, "the one that responds to light waves, "brings us messages from the farthest corners of the Universe. Although light travels so fast, it takes eight minutes to reach the Sun, and the light that arrives here to-day from some of the stars beyond, left them two thousand years ago. Our earth, large as it appears to us, is but a tiny globe, and light from objects on the earth reaches us practically instantaneously. Light travels in a straight line from the source and is reflected, refracted or dispersed. But it is only when it enters the eye, that we notice the object from which it comes or appears to do so. The eyes are placed in sockets in the bony skull well-protected from possible injury. by the projecting roof on top. The eve-brows and eye-lashes further help in keeping out all water and dirt from entering the eye. The light enters the eye through a glazed window which is often washed by a saline solution, specially manufactured in tear glands. The window is covered with a soft moist lid, which wipes it clean every few seconds and closes it when necessary. There is another circular curtain inside, which opens out to admit more light in a dark place, and reduces the opening to avoid glare in brilliant sunshine. A lens of pure crystal then collects together the rays and throws an image on a screen behind. Unlike lenses made by man the lens in our eyes is elastic, and can be made flat by pulling at the sides, thus altering its focal length and enabling us to see objects at different distances. The clearness with which we can do so depends upon the elasticity of the lens and the strength of the muscles which work it. Like other muscles, the muscles attached to the lens can be developed gradually, and if a little attention were paid to this aspect so many of our young men would not feel blind without their glasses.



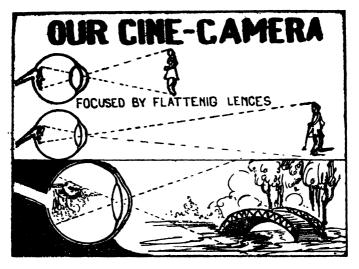
237. Man's wonderful cinemato-graph camera:—The image is focussed by the lens, on the screen which is not an ordinary ground-glass, but a sensitised film. It would be more appropriate to describe it as a layer of photo-cells filled with a chemical which is affected by the light, and what is more, differently by different colours. The

chemical is constantly and continuously renewed seven times a second. So that, if impressions succeed each other quicker than that, the eye cannot distinguish between them, and we feel as if the picture is moving, a fact made use of in the cinema. Thus with our wonderful cine camera we are taking 500 pictures in perfect natural colours every hour. What chemical is used, how it is manufactured out of the bread and butter that we eat. what happens to it when light impinges upon it, and how it is renewed thousands of times every day are all matters of which we as yet know very little; but it does not seem unreasonable to suggest that we should try to conserve that chemical as far as possible. We would laugh at a man who was constantly taking cinema pictures aimlessly only to destroy them, and yet that is what we are doing for a great deal of time. The eve is meant to enable us to see things clearly, and when we need it we must use it: but Dr. Bates of America* has pointed out that if we only keep this fact in mind, and give our eyes a little relaxation and rest whenever we do not really need to use them, our eyes will give us. much better service.

238. The pictures have to be interpreted .:— A number of thin cables convey the picture from the screen to the brain, where the Inner man has

^{*} The cure of Imperfect sight by Treatment without glasses by Dr. W. H. Bates (Central Fixation Publishing co., New York,)-

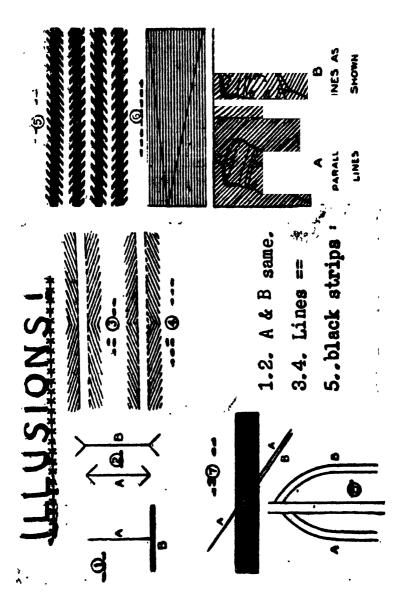
to interpret it and it is interesting to notice how he



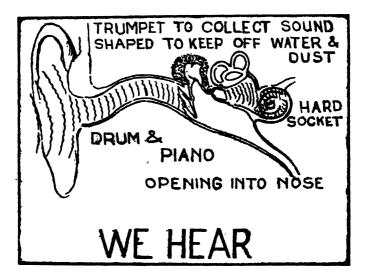
does it. The image on the retina is always inverted and yet we see the world in the proper way, because we feel it must be so. Light rays travel in straight lines, and so when we look at ourselves in a mirror for a moment we feel as if we stood inside it. When the moon rises it appears quite big by comparison with the dark objects on the horizon. It gets smaller as it rises. We rush in a railway train and our eyes seem to tell us that the trees are all running past us. When the earth rotates, it is the starry heavens that go round us. Two straight lines of exactly the same length with ends turned in or out appear to be of different lengths. A line drawn slanting across a number of parallel lines look curved, they have to be drawn curved, (as any

one can verify on the face of the King in a ten rupee note,) in order to make them look parallel. That is not the fault of the eye. As an optical instrument, it is a very good instrument, and yet the Inner man finds it so difficult to interpret its report. This should teach us to be a little cautious in making assertions. Our impression are no doubt the only thing we can go by, but then the other fellow may have his impressions as well. At best the eye is but an instrument—a telephone, with which the Inner Man can get into touch with other objects in the world.

239. Man "hears" with, his ears.:—Man's second wireless receiver is his ears. The rapidly vibrating reed in the horn of the approching motor car, sets up alternate waves of condensation or rarefaction, which travel ahead of the car and enter our ear. The funnel-shaped outer ear helps to collect them together. It naturally acts better on the waves that come directly into it, and thus enables us to ascertain the direction from which the sound comes. The two ears placed on both sides of the head save us from having to turn it right round. Hunted animals living in thick jungles, are provided with larger funnels. Unlike man, they can moreover move these funnels sideways without moving their eves from the direction from which they expect danger. All these contrivances are necessary for them as their very existence depends upon their



hearing very faint sounds. But man lives in a much noisier world and long ears would be a disadvantage to him, except for the night-watchman, or when hearing an interesting lecture. And so in his case, the funnels are reduced to a minimum size and the ear becomes a general-purpose receiver responding to sounds from different directions almost equally.



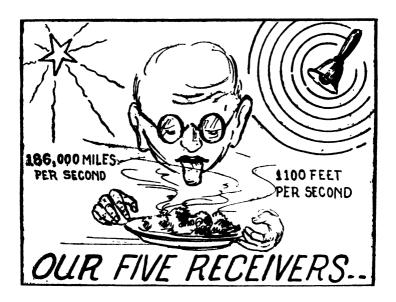
240. The drums and piano inside the ear:—The vibrations set up by the motor-horn and collected together by the outer ear enter the inner ear through a short passage where a tuft of hair deters insects from entering. If any dust goes in, it sticks to the wax secreted by the walls which moreover seems as a strong poison for any insects

that might get in. The sound waves impinge on a membrane stretched across the opening and move it backwards and forwards. Like other drums this skin can be drawn out more tightly and so made more sensitive; and that is what the night sentry does, when he strains his ear, to catch the faintest sound. This outer drum has air on both sides of it. the inside cavity communicating with a tube opening into the mouth. For a proper working of the drum this tube has to be kept quite clear, and it is not a bad practice to shut our mouth and nose and gently blow a little air into the inner cavity and out of it through this tube alternately, a few times every morning. (That was part of the Pranayama enjoined in the good old days). The pressure of air on both sides of the outer drum being equal, it can move freely. To this is attached another inner drum by a set of small bony bell-crank levers. This second drum has only one-twentieth the area of the larger drum, and so it moves with greater force necessary to set up pulsations in the watery fluid on the other side of it. The fluid is enclosed in a hard conch-like shell with a tapering spiral passage, with only two elastic windows—the oval inner drum and a circular window closed by another membrane. Immersed in this fluid is our little piano—one in each ear—with its very sensitive and finely tuned wires capable of responding to a thousand notes. How these nerves vibrate, how they analyse the complex waves that come in, and how they convey any meaning out of them, we do not know, but they do perform this miracle. They do receive the sounds, and send them along specially laid cables to the brain, where they await the pleasure of the Inner man. If he is not attentive the sounds are nothing to him. Man can train his ears to ignore certain notes, so that if he has to live on main roads he is not disturbed by the passing tram-cars; or he can make his ear sensitive to the slightest change in notes, as does the musician. But afterall the ear is an instrument only—a telephone which the Inner Ruler may use as he pleases.

241. Man "smells and tastes.": - Man has a third receiver in the nose and a fourth one in the tongue. They are not affected by vibrations from a distance but by the object itself. As a gas floating dust suspended in air, it has to enter the nose before we can smell it, and dissolved in water it has to come in contact with the tongue, so that we may taste it. Mr. Smell and Miss Tongue are really officers of the immigration department, as we have already seen, meant to make sure that only wholesome food is allowed to enter the system and they work together more or less. If the nose is tightly pinched, it is difficult to distinguish the taste of various objects, and many a nauseous medicine can be put down the throat in this manner. If the eyes are also closed it is possible to confound a raddish with an apple.

Like other senses Mr. Smell and Miss Tongue receive their messages, and transmit them to the brain: but they are both so excitable that they go on shouting at the exchange a long time after the message has stopped coming in. If we sip two drinks alternatetly, we cease to distinguish between them. The sense of smell is very strongly developed in case of some animals; and hunting animals can see their prey with their nose, from a long distance. A dog will make sure of his master by sniffing at him and a bloodhound will follow a smell for miles. Bees seem to have the best smell. Even in the case. of man, a grain of musk will scent a room for years, and a very sensitive nose can smell one part of sulphur diluted with a million parts of air, Some persons have tongues that will detect one grain of quinine in five buckets-full of water; but in the case of a majority of mankind both senses are ruined by misuse. Just after an ice-cold drink quinine will not test bitter and the fumes of alcohol and tobacco will drown all other flavours. No wonder we cannot distinguish between the delicate scents of different flowers, far less be cognisant of the subtle aroma which, according to tradition, is said to accompany even invisible Beings. Japanese are the only nation who attach any importance to the cultivation of smell and perhaps their example is worth following. At any rate. there seems to be no reason why we should neglect two out of our five receivers through

which alone we can come into contact with the outside world.



242. Man feels hot and cold.:— Last but not the least comes the sense of touch. Unlike other receivers which are localised in one place, this sense is spread all over the body. Millions of telephone wires spread out like tentacles from the skin, so that a foreign body coming in contact with us anywhere, is at once reported to the brain. The tiny receivers at end of each wire, smaller than the tip of the finest needle, tell us whether the object is soft or hard. By moving our hands a little we can ascertain whether it is smooth or rough, and by combining the report from various stations, we can

say if the surface is plain or curved. These nerveends are not uniformly distributed all over, each receiver serving a small zone, so that we prick the skin in two places lying in one zone, the sensation we get is that of touching one point only. A pair of compass-points can be distinguished by the tongue if only one-twenty-fourth of an inch apart, by the tips of the fingers if one-twelfth of an inch distant. The same points an inch apart on the forehead, or even two or three inches on the back, will give rise to only one sensation. Another set of nerve-ends tell us whether the object we are touching is hot, and yet another set which reports if it is cold. If one of these cold points is touched with a hot wire, the sensation produced is of cold. We do not use one thermometer to measure heat and another one for cold: and it appears curious that we should have in our body two sets of wires for the purpose, yet that is what makes it possible for us to get accustomed to cold or heat by the introduction of a little resistance into the cold or hot circuits. Then again the sensations are comparative. If we keep one hand in ice-cold water and the other in warm water for sometime and then place both of them in tepid water, the nerves from the first will report to us that the tepid water is hot, while the second set will tell us that the selfsame water is cold. Thus here again the messages received have to be properly interpreted.

243. The net-work of cables inside us: -We have seen that all impulses from the various sense organs travel to a common centre—the brain. this purpose the body is provided with a wonderful net-work of cables inside us. Each cable is composed of a number of fibres, having an inner core, which like the copper-wire is continuous for long distances, enclosed in an insulating covering sheath. inner conducting axis-or Axon is extremely being only 1/2000 th of an inch in diameter. These fibres are laid in bundles, encased like a modern multi-cored cable. Our body being symmetrical all these cables are laid in pairs. Forty-three such bundles start from the brain and branch off in al directions ensuring thorough communication with all parts of the body. Twelve of these pairs go to the sense organs in the head (eyes, tongue etc:) and to the muscles controlling their movements. The remaining thirty-one pairs then enter the flexible bony conduit at our back, to form the spinal chord; but in doing so they change sides just at the entrance so that the head can be turned in any direction without throwing any strain on the cable. The result however is that a blow on the right lobe of our brain paralyses the left side of the body and vice versa. Five large pairs of nerves proceed to the arms and nineteen small pairs branch off at intervals through special windows in the back-bone, from the spinal chord to the various parts of the trunk. At the lowest end are left

seven pairs which spread out in the legs. Thus is the whole body very efficiently served by a wonderfully well-protected system of nerve-cables, which would excite the envy of any modern telephone Engineer, especially when we look at the automatic exchanges, which we shall speak of later.

244 Other sources of knowledge.:—These are the five principal ways in which we get to know the world round about us, more or less perfectly. and by combining the impressions we can get some more information. The impressions from our two eves combined together give us an idea of solidity and distance. Our sense of touch, together with the report from the muscles about the power required to move an object, gives us the sense of pressure or weight. The semicircular canals in the ear, together with messages from the muscles in different parts of the body, give us the sense of balance. Man has moreover been able to extend the range of his senses a very great deal by studying the laws governing the transmission of the vibrations in the medium. Thus by interposing a few properly shaped pieces of glass, he can magnify the leg of a flea a thousand fold, and bring the moon within a few miles of his eye. He can preserve a vision by photography or painting; and he can pickle music in his gramophone plates; or both together in his talkie film. He has invented ways in which a sound vibration can be converted

into an ether vibration, which after travelling a million times faster, can be reconverted at the other end into sound waves again, so that a man in India can actually hear a person speaking in London, the same moment. Improved means of communication now enable him to smell, taste and touch objects from the farthest corners of the earth. Modern science has increased the scope of his senses and this may yet expand. Whatever the additions, man's knowledge of the objects roundabout him will be confined to what his senses report. He will and can never know the things as, they are but only what they appear to be. In Kant's words he can see the phenomena, but the noumena never. The senses deal only with three dimensional matter; and if the man is always limited by them, and has no means of transcending them, that would be quite true.

XXIII. Our Cities Radio transmitters.

245. "Man Perceives.";— We have seen that the various senses send in their reports to the central exchange, where they are all compounded together into sensations. These sensation are all taken down in shorthand, and filed for future reference in our brain? and whenever any fresh sensation arrives, the ever-awake record-keeper, as it were, takes out all his previous documents on the subject, and reads them aloud to us.

When we visit a theatre what do we experience? Our eyes report to us the scenery on the stage, the brilliancy of the light and the gestures of the various The ears bring in their voice and music. we are fully engrossed we shut off the other three receivers for the time being; but after all they are instruments and they will faithfully reproduce what they receive. The eyes cannot help reporting the large hat or pugree in front of us, and the ears will intrude on us the snoring of our neighbour or the tittle-tattle of the persons behind us. Our nose may enjoy the smell of pepper-mint. The tongue will notify the taste of the chocolate we may be eating, and our telephones from the skin will remind us of the tender and precious hands we may be clasping, or of the tight bootlace or the mosquitos.

All the time our record-keeper will be telling us how, when we saw the same play three months ago, the performance was much better. All these impressions will crowd together into the central exchange, and although we may succeed in suppressing some of them, it is their sum-total jumbled together that we perceive.

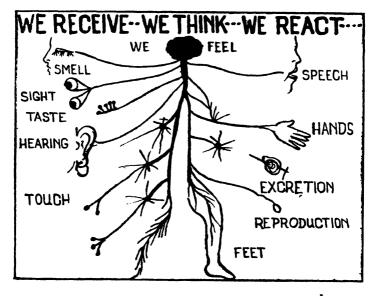
246. Man thinks.: We have seen that the sense-impressions travel along specially laid cables—our nerves—to the brain, where each sense organ has a lobe of its own. That they all somehow get mixed up is a fact, and this would lead us to expect some physiological fusion of the different wires into one common exchange. If such a centre did exist it might have been called the Ego or the soul, but it is curious that no such sensorium commune exists in our brain. There must be some such place, but it cannot be cut up with a scalpel—it is not three-dimensional. Memory also is a fact, but memory is not a thing. Sensations and memory do act through the brain but they do not appear to reside there, just as electricity does not live in the switch. Both the grey matter and the copper contacts are no doubt necessary but they are not the current. A whiff of chloroform will temporarily shut off the sensations from the Man. It is this Inner man who broods over the various perceptions. and tries to understand them in the light of this. previously recorded experience. It is he who attempts to find some sequence between different impressions and thus thinks reasons and forms tentative judgment, which are filed again. It was once said that the brain secretes thought as the liver manufactures bile. But the bile can be put into a test tube, while thought has eluded all attempts to catch it. Does it seem ridiculous to suggest that thought is a phenomenon with four dimensions, as perhaps electricity itself is? An honest acceptance of this possibility might help us a great deal.

247. Thought can be preserved:—Although thought cannot be contained in a test tube, it can be, more or less correctly, preserved by the great invention of writing. How a few symbols arranged in a particular way give rise to the writer's thought in the reader's mind is a marvel which distinguishes man from other animals. This marvel enables one generation to record and transmit its experience to another in a far more detailed and definite manner than the germplasm can do through instinct. throws on man a much greater responsibility and altogether changes the laws of evolution as applied But after all language is very inadequate to express all that we feel and think, as we have all realised some time in our life. Like the gramophone plate or the photograph or the tinned food it lacks the original vitality—or vitamines, although it admirably serves our daily purpose of life. Here again the multiplicity of languages all conveying

the same thought is something amzaing. The brain impressions must correspond to the sounds in the different languages whereas the thought as interpreted by the inner man is one, and that is another argument which shows that thought resides in a dimension higher than the brain.

248 Thought can be transmitted and received.:—Even in a space with four dimensions, vibrations are possible, and whenever we think, we send out impulses, which travel from us outwards in all directions, like wireless waves. Love and hatred appear to be the mirrors with which we can focus these waves in a particular direction like beam wireless, and if another man at the other end has a sufficiently sensitive receiver he may be able to read our thought direct. That is perhaps what happens, when we give our offerings to the dead or address God in our prayers. Have we not been told a hundred times, that it is not sugar and sweets that travel but our love and devotion—our feelings and thought? This question of thought transference has recently been experimentally studied, and there is enough evidence to convince an unbiassed mind. that it is a fact in nature. Whenever we think transmit, nay—cannot help transmitting thought which affects people round about us; and the invisible, but real and incessant pressure of all these thoughts constitutes-communal tension and public opinion. Well-directed and powerful thought

currents from Prophets have changed the course of the world, and in "thought," we have yet undreamt-of power, which we can use for weal or woe. In mentioning this it is as well to keep in mind, that evil thoughts or thoughts of hatred generally get reflected, and recoil upon the sender; and people who deliberately try to dig graves for others sleep in the same themselves. If all this speculation is correct, thought would appear to be our sixth sense, which would need a receiver and transmitter, and the pitutary body and pineal gland may be answering that purpose.



249 Man responds to stimuli.:—We have so far considered the manner in which man receives

information about outside objects. He correlates them, tries to understand them, and then responds to them—sends back his own reply in five ways. He moves parts of his body or the whole body. receives food and throws out what he does not want, conveys his thoughts to others by speech and writes them down with his hands. He tries to reproduce himself in his off-spring. He also sends out thoughts direct as we have already seen. these, speech and writing are the special peculiarity of man, but all other animals respond in the remaining four ways. All plants excrete and reproduce, and some move their leaves towards the sun, or close them at dusk and catch insects. Dr. J. C. Bose has produced much evidence that both the living and non-living respond to external stimuli exactly alike, the only difference being of degree. behaviour of all Life, whether encased in a mineral, vegetable, animal or human sheath is essentially the same. We have already seen how all matter is the common property of the whole creation, and it is only natural that all life should be one and indivisible

250. Man's motor activity:—Man responds to stimuli also acts as a transmitter by the aid of his muscles. We have already seen how movement is obtained by the contraction of the appropriate muscles and how each muscle is composed of innumerable engine-cylinders, which are ready

charged with fuel at all times and this fuel explodes on receipt of orders from the inner man. are sent out along motor nerves specially provided for the purpose. The telegraph wires along which commands are transmitted to the muscles are similar to those along which sensations are conveyed to the brain; but they form distinct sets, which are laid side by side. Messages travel only in one direction. The sensory set brings information. which the Inner man perceives. He thinks over it, and issues his instructions to various engines. But the demands on his attention are so varied and countless, that it is practically impossible for him to go into every detail, and as nerve currents travel only a couple of hundred feet per second, it means a distinct delay. Like a wise administrator therefore, he resorts to decentralisation. In addition to the central exchange in the brain, he has small local exchanges at every iunction. which act almost in an automatic mannerand directly issue necessary and suitable instructions in most cases, without awaiting orders from the central station. Unlike human officials, copies of every petition from the humblest citizen are sent to the King, for his perusal. But the inner man generally confines his attention to the more imporant things and in some cases he may ponder over all the evidence collected by his senses, for days and months and even try to attune his thought-receiver, to catch inspiration from higher sources, before deciding upon

a course of action. The outer senses are generally so loud and insistent, that to quieten them for a short time, to hear the inner voice is not only no superstition, but the application of a scientific truth of the highest importance. Thus does man control his voluntary movements.

251 Man communicates his feelings and ideas.:—Man is not content to live alone but he wants to communicate his feelings and ideas to others. He does it by converting them into sound waves, for which he has been provided with a very delicate reed instrument, the larynx. We saw that a number of idle spectators enter our oxygen market, but once they enter our lungs they are caught and used to set our larynx into vibration. The slit can rapidly open and close sending out alternate gusts of wind, starting sound waves, which are propagated in all directions. The tone of the sounds produced can be further varied by the position of the teeth, the vibrations of the tongue, and by closing and opening the lips, giving us the various vowels and consonants. In westren languages where the alphabet are derived from Pectographs these sounds are mined up, but in Sanskrit they are all arranged according to the modifying cause—labials, gutturals etc. It is said that these different sounds are connected to different invisible forces, and on a correct understanding of these depends the use of Mantric syllables like

"Aum" "Rhâm" etc. which to a modern man appear as so much jargon and nonsense. It is said that the creation began with the Word, the Logos; and it is a matter of common experience that one angry word can cause a wound, or a kind word heal it. Of course the spoken word includes the written word, which we all constantly use, to get into touch with the rest of the world; and speech is the only transmitter that man has got, besides the one for sending out thought direct.

252. Man has a language:—The origin and growth of language is a very fascinating subject, on which Prof. Maxmuller in his "Science of Thought" (Longmans 1887) has a great deal to say. He there points out, how all thinking is like digging tunnels in sand, and if language was not there to serve as the brick-lining, all our thinking would be but passing waves. Sensations give rise to Percepts, and these become Concepts when put into words. Thinking is like "speaking in the stomach." As the Polynesians put it. As Hobbes put it. Man is Rational because he is "Orational," Rational thinking and language are inseparable; and Language is thus the great difference between man and brutes. It may be, that we have many words derived from interjections or natural sounds, or the barking of different animals: but these are not enough. Every predicative root expresses an ACT, and an ACT implies Subject and Object. It is from such ROOTS each of which connotes some specific Act that a language is formed; and Maxmuller points out how Panini's Grammar of Sanskrit contains eight hundred Roots, and 121 concepts which no other language can boast of. How the various languages and innumerable dialects stand in relation to each other are subjects of speculation, but the number of tongues being used in this world runs into hundreds; and the facility with which a child picks up his mothers tongue is something amazing. A hundred men express the same thought in a hundred different languages, and write it down in a hundred different scripts, and yet they are able to reproduce more or less correctly the original Idea. That is a marvel we are told that there is a method of writing called SENZAR which will convey to different people the same thought, to each in his own language. which would be greater marvel still.

253. Man wants to reproduce:—Another motor activity of man is the desire to reproduce himself. This is a characteristic of all living beings without which the three-dimensional creation would cease to be in a hundred years' time. The desire to reproduce is therefore strongly implanted in all living beings, inspite of some necessary pain involved in the process. We have seen how cells multiply by division. We are told in the ancient Puranas that human beings at one time in the history of the world got off-spring by "budding".

Later on they developed sex, but like plants they were for a time hermaphrodite—having both sexes in one body, of which we see a remnant in man having undeveloped mammary glands. The functions of the two sexes being so different, each individual specialised only on one side. After this, it is said that man could lay eggs, as birds do to-day; but all these forms are now past history—whether actual or symbolic we do not know. But we all know how the history of Evolution during long ages, is repeated during the Embryonic life of each body so that, at a certain stage there is very little to distinguish the embryo of a man from that of any of the lower animals. The existence in the human body of so many little things which are but vestiges of our long-forgotten past is an accepted fact; and so, these Puranic stories need not be dismissed as absurd. Nature has evidently tried innumerable experiments for millions of years before it arrived at man as he exists at present, and there is no reason to imagine that this process has now come to an end. All we can say is that today in man, the child is carried in the mother's womb, and blood circulation through its body is maintained by the mother's heart pump, until it has grown sufficiently and can carry on an independent existence.

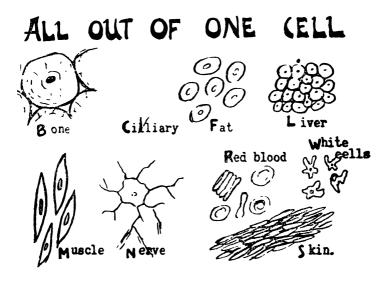
254. The greatest Magic —We see every day. Man secretes sperm cells, and woman ova and it is only when one of the former reaches an ovum,



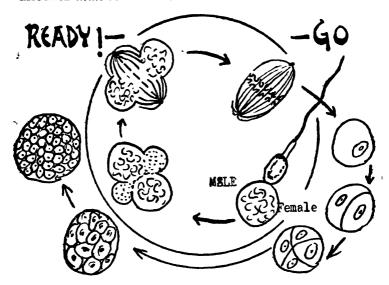
inside the uterus and the two fuse together, that the new life begins its existence. Neither cell by itself can start new life. They must meet and fuse inside the chamber where they can attach themselves to the wall, and be further nourished and protected. The Sperm and the Ovum are as it were poised for a Race, and as soon as they hear the word "GO", a new and intense activity, previously unknown to either the sperm or the ovum, manifests itself. The two cells fuse together, their Chromosomes merge into each other, only to divide anew, and then it starts dividing and multiplying itself at a tremendous rate. From that One Cell spring up a variety of tissues suited to the formation of bones, muscles, nerves, skin and so on-all made out of the blood supplied to the embryo by the mother, which, like molten metal, fills the numerous moulds. And so rapid is this process, that the number of neural ganglis, alone in the brain and the body, produced by the end of the third month of antenatal life runs into many millions.

255. The sperm and the ovum are both indispensable, but if they were the only factors we would not have so many childless marriages. Like the two contacts of an electric switch they are doubtless essential, but they are not electricity, nor is Life contained in the sperm and ovum. The switch may be closed a hundred times, but if the voltage is not there no current will flow. It

is not therefore unreasonable to suggest that the sperm has in reality a tail much longer than the one



shown by the microscope — a tail extending into fourth dimensional Everytime matter. attempts to reproduce, he is really probing the ether for an Ego — a unit of consciousness, a soul, who is willing to be born of him. Only if he finds one. is the current of Prana switched on. Life processes begin. The cell formed of the fusion of the sperm and ovum begins to divide. It multiplies itself a millionfold. It differentiates into bones, muscles. nerves and all that. Matter, as it were, pours into a mould, in a symmetrical manner because it comes in from the fourth-dimension and lo! The greatest magic that man knows of is accomplished Man reproduces his own form—as a house for another man to live in.



256. Three more motor activities:—In addition to speech and reproduction, Man reacts on his environment in three more ways—He uses his hands, his feet and excretes what he does not want in his system. Man's five senses bring to him impressions from outside, he feels, i. e., compounds them with the contents of his memory, thinks over them, and sends back his reply, in one of these five ways. The energy set free by the impacts from outside, is expended in the response sent out, and real health and happiness, depend upon the orderly input and the output balancing each other. Every sensation not suitably disposed of becomes a whorl and a

wart in the system, and leads to worry, which kills more men than work. Of the five outlets the hands which like 'speech distinguish man from other animals and the feet can be employed most usefully, and that is why in childhood. plenty of exercise and games are prescribed. All sex-troubles begin with morbid brooding, as the incoming impulse must find some outlet, and if not led out through the hands and feet, it takes the more undesirable course. Regulated activity as is required in music, painting, or even in good hand-writing or in manual occupations, gives a rhythm and a better tone to the whole body, and has a great effect on a man's character. The fifth activity of throwing out all the waste products of the body is of course a necessity of existence: but we have always to remember that what is harmful to us we must not thrust on others. We have already seen how in Nature, what is not required by animals is just the thing needed by plants; and our constant aim should be to pass on what we do not want to the third Great Kingdom of Nature the bacteria, so that they may quickly break it up into simpler material. We must provide for these agencies which do the decomposition suitable conditions in a quiet place, where they can work with the least possible trouble to animal life. Plants build up complex structures from simple minerals; animals take up vegetable matter and build it up into more intricate patterns: these having served their purpose for a time, are thrown out and then broken up by the bacterial kingdom into simple inorganic salts, to be used up once again by plants. So goes the wheel of life, in which Man plays his part. He receives impressions, feels and thinks over them consciously, and reacts to them, gaining more and more experience.

257. Routine matters and health:—Apart from this conscious life of man there are a number of routine matters, like the pumping of the blood, breathing, the assimilation of food, excretion of waste products and carrying out repairs, etc: which are very necessary for the well-being of our body as we have seen, and these must continue without interruption. These are therefore carried out by a set of "involuntary" muscles. The inner man never interferes with these, and in fact seems to have lost the power to do so, although instances of vogis, who can stop their heart-beat are unknown. As no muscles will contract without stimulus, and no motor nerve will send a current unless it is excited, it is clear that there must be something, apart from all sense-impressions, which constantly pokes at them. The words automatic and sympathetic satisfy western doctors; but according to the eastern teachings that is the function of Prana a form of Solar energy, similar to light or electricity. These rhythmic pulses in four-dimensional matter are caught by a receiver acting in the proximity of the

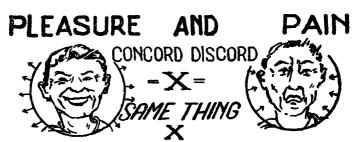
spleen—the Solar Plexus, and thence differentiate into three, five or seven (as differently stated) streams, and it is these streams which govern all our activities —both sensory and motor including the sympathetic system. Switching on of this current is "life"; cutting off "death." In the eastern system of medicine this life-energy is taken as dividing into three chief streams. These govern assimilation, glandular secretion, and excretion known as Vata. Pitta and Kafa respectively, which certainly are not wind, bile and expectoration; and it is by the equilibrium of these three that proper health is maintained. The eastern physician therefore looks to the cause of the disease while the western doctor treats from the symptoms. This subject is very little understood, and perhaps it is well, that it is so, becaue these pranic currents are so potent, that for a Man who is unable to control them, they are a source of danger.

258. The Inner man: — We have seen that all knowledge depends upon three things—the transmitter, the medium and the receiver. We all receive through the five senses, and transmit chiefly through speech. The medium colours all our transactions, which are also affected by the imperfections of both transmission and reception. As long as we have to depend upon vibrations in this three dimensional world we can not know what things really are. It is all waves, waves and waves. They

strike us now as sound, now as light; but perhaps they are all the same. Persons have claimed that they could see colours when a symphony was played; and in others a succession of coloured beams seemed to produce the effect of music. That may be a mere hallucination, but if we always interpret an inverted image on our retina as an erect one all our life, there seems to be nothing impossible in seeing red or green when we hear certain notes. Apart from all instruments, stands the Inner man whose power of understanding is so subtle, that he can get accustomed to any vibration he likes, in a movement's time. In London a man will keep to the left and next day in Paris keep to the right with perfect ease. The outer world exists, and we have to understand it as best we can, but it is only the eighth part of the iceberg above the water. It is at least equally wise to pay some attention to the real man-the INNER MAN-the Jiva, who is conscious in four dimensions, or perhaps more.

XXIV Pleasure and Pain

259. Pleasure and Pain:—We have thus seen that quite apart from the receiving and transmitting apparatus, each one of us has within himself, the Inner Man—the Operator at the exchange and it is he who interprets the whole in the light of his previous records filed in his memory. A surgeon may perform an operation on our body, and we may even see it with our own eyes, and yet, if a local anasthetic has cut off the nerveous impulse from that part of the body, we shall not feel it in the least. Under chloroform a man's leg may be sawn off without his feeling it in any way. All the time we spend in



FIRST PLATE OF ICE CREAM---2ND---3RD
HUNDREDTH PLATE
FIRST MILE OF A WALK----30th MILE
A DOLL FOR A GIRL--- SAME FOR A BOY

our sleep is a blank in our consciousness, devoid of all sensations. It is only when the Inner Man is attentive to sense impulses, that they produce in us a feeling which we may broadly describe as "agreeable" or otherwise; and when combined with the contents of our memory it becomes, pleasure or pain. What constitutes pleasure and what is the real nature of pain are matters which have been discussed and defined in a number of ways. When in the light of our previous experience we would like to repeat the experience, I think we would be justified in calling it pleasure; when we would rather not go through it again, we must call it painful.

260. Sources of pleasure and pain:—The experiences we like to repeat or which we shrink from may originate in our own body or, as is more often the case, be due to our memory being excited by some slight external stimulus. For instance the recurring wants of the physical body, hunger, thirst and sleep if unsatisfied will cause pain. To whatever station of life a man belong, or whatever may be his activities the pain due to real hunger or thirst will be the same; and and pain will stop as soon as the deficit is made good. Any wholesome food will meet the demands of hunger and wine is not necessary for quenching thirst. The desire for wine and rich food are appetites; but apart from these, we know how the smell of spicy food

excites in us a feeling of hunger. There is such a thing as a palate and pain due to our not being able to satisfy that palate. Excessive heat produces pain which can be reduced by cooling the skin, and pain due cold may be relieved by covering the skin to retain the animal heat within; but the pain due to our inability to obtain fine soft cloth during war-time is one excited by our memory. The throbbing pain which accompanies the formation of puss round a thorn, or that due to a really bad toothache, or a headache are matters of common experience. Where suffering is due to a disease, the microbe has to be allowed to run its course; and such purely physical pain is most difficult to bear; but in all cases it is the mental part which really aggravates the situation. If we remember that a foolish word from our cousin is no more than mere vibrations in the air, we will not allow it to rankle in our heart and to make us miserable for months afterwards. Afterall all pleasure and pain that comes to us is the exact equivalent of our own actions; and a cheerful attitude of mind makes a very great difference. is the brooding that makes suffering unbearable.

261. Nothing is pleasurable or otherwise per se.: - Barring the appetites where there is the massive sense of want which may be called pain. because we do not like it repeated, all other pleasures and pains are, as the Gita says contactborn. No object in nature is pleasurable or painful

in itself, but it is only when it impinges upon our consciousness through the medium of our senses, that pleasure or pain is the result. All meats however pleasing they may be to one who eats meat. may be thoroughly disagreeable to a strict vegetarian. Some men feel a nauseating sensation if they stand near a place where onions are being roasted, or meat fried, whereas these same smells make the mouth of others water. It is surprising how common fruit like the mango or the banana are thoroughly disliked by some; and while children will eat the most sour mangoes or tamarind with great relish, others may not be able to stand them. The quantity of chilies and spices consumed with evident pleasure by people in the east are a wonder to those who come from the west, where they are not accustomed to them. It is all a matter of taste and we all know how tastes can be cultivated, and often are. Dance music which will throw a westerner into raptures, will make an easterner feel jumpy, whereas an Englishman may consider all our music as "so much whining". It is not every Indian who can enjoy scientific music, or appreciate the paintings of the modern Bengal school. A smoker will talk of the aroma of his brand of cigarette, while one not given to smoking will feel disgusted with the unpleasant fumes.

262..... And again something may be very gratifying at one time but not so a few minutes

later. What is palatable and even delicious when a man is hungry, becomes so much carbon and hydrogen after a heavy meal, and the thirtyfifth Laddoo or fifteenth plate of Ice-cream will not taste as sweet as the first one, and may prove a positive torture. Dolls which captivate a girl at one time will pall on her a few years later; and a boy will change all his hobbies and even games as he grows into a man. An evening walk for a mile may be very refreshing, but if we are compelled to trudge on for ten and fifteen miles, we begin to wonder if the mile-stones have not been placed at longer intervals. So it is that there is nothing in the world which is pleasant or otherwise by itself. It is the contact of the objects with us—the subject. governed by the time and place of contact, combined with the contents of our pervious experience recorded in our memory, that constitutes real happiness or pain. We suffer because we often get what we do not like, or do not get what we want: and even when we get it, we suffer because we are afraid of losing it. Diseases bring suffering, old age comes to all and the very fear of all these kills us a hundred times before death arrives in person to take us. That is why the Gita tells us that all "contact-born" sensations, whether pleasant or painful have a beginning and an end and no sensible man lives amongst these. can get above both only by detaching ourselves from both.

263. Pleasure expands: Pain contracts:— When a man is happy he somehow seems to expand, to grow lighter and more buoyant and his face broadens. He feels like walking on velvet: he is elated: he goes with a sprightly step: he is gay as a lark: he giggles: he bursts out into laughter. When a man is pained he appears to shrink: he sits down with a heavy heart: he is depressed and puts on a long face. He is in the dumps: he is dejected: his tread is heavy: he is dull as a beetle: his eyes are cast down: he is gloomy: he whines: he weeps. Except in the case of eating and drinking. there is no real accretion of matter, and in the purely physical sense such expressions have no meaning. And yet, if we take them as applying to what we may call "The Body of his Desire", we shall see that the words we constantly use are not mere figures of speech. These oft-repeated phrases embody greater truth than many imagine. Obviously these sensations which please or displease start certain processes within us, which result in that feeling. It is like an increase in the amplitude of the vibrations of particles which compose the Desire Body—a question of loudness or Tone—in which memory certainly plays a great part. If we accept that Man is "born" by the switching on of the Current of Energy PRANA, we shall see that the increased Amplitude enables us to pass through us a greater out-put of Prana, which from beyond the Physical—from the Fourth Dimension, as we have termed it. And that is the real source of our happiness. If we pause awhile and examine the stupid physical sex act, we shall see nothing in it to justify the maddening influence it has on all animals, including human beings; and yet it is the only way known to an average man, in which he can switch on the maximum current of Prana, for a moment at any rate. A happy man literally lives a fuller life, lives abundantly. He shrinks and shivels when pained. Pleasure like heat expands: pain like cold contracts.

264. Pleasures of Art:—Sex utilises the sense of touch. The nose and the tongue do not apear to be capable of greater development, but even they can made use of. Hence the use of incense and Prasad in our temples and the pleasures of table which are only next to sex. But all these require a lot of gross matter and so are considered earthly. The remaining two senses can be excited with mere vibrations. It is quite possible to induce a high life current by cultivating a finer sense of sight, so that we can appreciate the harmony of colours and transfer them to canvas. Then a sunset with its wonderous hues and tints will send us into raptures. Music in various forms can thrill us to the same extent: and if we can become a Poet who mixes both colour and song with the emotions of the soul we will perhaps rise higher still. The life current which expresses itself as sex in the average man can thus be transmuted into these channels. During the growing years when sex just dawns on man, Music helps him a great deal in getting it under control. But it must be kept in mind that all these, sex, painting, music and poetry are all different manifestations of the same energy flowing into us from the fourth dimension, and the line of demarcation between them is very thin. That is why Artists are often too passionate They are all persons who live at a high pressure, who live abundanty. Their joys are great and so are their sorrow.

265. The Body of Desire:—Although Pleasure has the effect of expanding the Body, we have seen that the real accretion to the physical body is the food we take in or the liquids we drink, They do excite our smell and taste, but our feeling of expansion is in all cases a mental effect. Not the physical but the mental body, or the Body of the. Desire as we may call it, expands by the increased amplitude of its vibrations—the Vibrations of the particles of which that Body is composed. Now if we accept one fact of which, those who know have spoken to us, that our Desire Body consists of innumberable such particles having different properties, so that if beautiful music sets going one set. of particles, sex adds to the amplititude of others of different frequencies. Just as a particular Radio wave will affect our set only if we have tuned it

to that wavelength, external vibrations will make us angry only if we have particles which can express the frequency of anger and so on. The simile goes further; just as every Radio receiver acts as a feeble transmitter, and affects the receiving sets in the vicinity, if we allow ourselves to get angry, we fill our neibourhood with vibrations of anger and so no. Not only that, but we set going particles in the atmosphere which respond to that rate of vibration and, these particles can easily enter our body, and finding a congenial atmosphere stay there. So it is that every time we yield to a sense-pleasure, we increase our tendency to yield to it next time the same vibrations come along. That is the way in which the Body of Desire grows; and gets reduced by the dropping off of particles which are never excited, or whose rate of vibration jars with our dominant note. That is what King Yayati proved to himself after a personal experience and told us that Sense-pleasures increase like fire fed with ghee. Not self-indulgence, but self-control: that is the road to happiness. Seek not the pleasant, but the beneficial, say the Upanishads.

266. The ladder of happiness:—Everyone in the world today is convinced that if only he can get enough money all happiness is assured to him; at any rate we all behave as if that was our firm conviction. It is interesting to note that in the olden times they put Optimism is the First essential

of happiness. Tenacity of purpose came next, and Strength only third. Those who wonder how unprepared England ever won the latest war, they will see how they followed the Upanishads better than the Germans, who started with the third quality. A man with the three virtues give the "whole earth with all the wealth in it,"-that is the highest measure of human happiness, which the British and Americans are after. But, say the wise man of old, multiply this by a hundred and then you will get an idea of the happiness of the man who is self-controlled-who has mastered his own desires. If the two great Nations who now lead the world really wish to add to the happiness of mankind, they can not afford to forget the next lesson. The Shruties do not stop at that. They ask us to multiply that hundredfold happiness a hundred times again and again, till we arrive at the Supreme Bliss which is the birth-right of every man in the world. But constant discrimination between the Pleasant and the Beneficial, and self-control, not selfindulgence is the way to that Kingdom of Happiness.

XXV Emotions—the horses

267. Emotions—their diversity:—We have seen that pleasure and pain are not properties of matter, but are entirely the result of its contact with Life, with its own vehicles of matter. If the impact is harmonious the jiva likes to repeat it—it attracts him. If otherwise, it repels him. In each case his motor response is governed by this feeling. Now the impulses that come in do not always come from inert matter but from other foci through which Life seems to act—other jivas, and we very soon begin to confound the vibrations with their transmitter. So we transfer our attraction or repulsion to the other man, who is the source of those waves. In this, the memory of previous experiences plays a very great part. It creates in us certain expectations, which further colour our reponse. We thus gradually come to develop a certain attitude, which we habitually adopt towards men and things; but as this depends upon us as well, exactl

one and the same incident may have results on different people. Imagine a down by a tram-car. The first effect accident is to attract the attention or many of whom would simply rush i the victim, and even shut out from air he badly needs. One man may man to get up; or try to stop the

from his wound. A second may run for a doctor. or a third consider it best to take him to the hospital and so he may go out to secure a carriage. A fourth may be so overpowered by the sight of the red blood that he may sit down on the pavement and weep. A fifth may be inspired to write a poem. A sixth may take down the number of the tramcar and the name of the driver and start quarreling with him, so as to fix the responsibility of the accident. A seventh may hurriedly run away from the spot, lest the police call him as a witness. And yet another, who may be simply looking on, may be sending out strong thoughts of peace to calm the excited crowd, and be pouring strength into the unconscious man to help him to bear his misfortune bravely, without getting bitter about it. Such would be the response called out by exactly the same event and its nature will depend upon the rate of vibrations that each individual has builded into his body.

268. Emotions are like horses:—Such a response that is habitually evoked in a man is called an Emotion—that which moves out of him. We likened our body to a machine, then to a huge city in order to understand the working within it; but now when we come to emotions, we realise that after all the physical body is not as important as it appeared to be. Half-a-dozen strong men may find it difficult to hold down a very weak maniac; and instances are not unknown of mothers in the most feeble condition of health, doing most super-human

feats to save their children. An orator by suitably modulating his voice and by his emphatic gestures appeals to the emotions of his vast audience—now of pity, now of patriotism—and makes their blood boil while the the poor physical bodies of the listeners stand stock-still and even breathing appears to stop. Gandhijee with his 90lbs. of flesh kindles the flame in the hearts of millions. Such is emotion compared to which the physical body is but inert matter; and that is why the ancient Sages have compared the former to horses, which drag the latter —the carriage—whither they will.

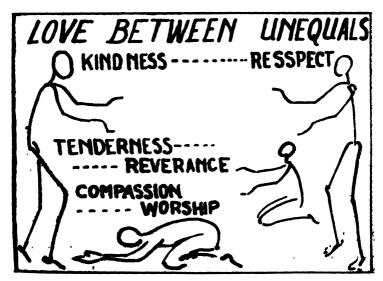
269. Love and Hatred .: - We have seen that emotions are rooted in pleasure and pain, likes and dislikes, attraction and repulsion, love and hatred. Dr. Bhagvan Das of Benares has shown that they can be best classified under these two heads.* He suggests that every feeling of attraction or repulsion in our mind is mixed up with a consciousness of our inferiority or superiority to the object of our emotions. A man dislikes both a mosquito and a tiger, but his emotion in either case is not the same. He would feel like annihilating the former, but a glimpse of the tiger ready to jump at him will induce him to run for his life, or even paralyse him and root him to the ground in abject terror. In both cases it is a feeling of repulsion but it expresses itself in different ways. Even in the case of a tiger attraction

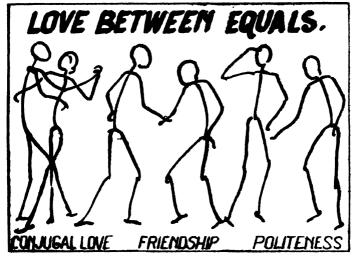
^{*} The Science of the Emotions by Dr. Bhagvan Das, Theosophica l Publishing House, Adyar, Madras.

is possible. There is the story of Shivajee who was once asked by his guru to bring milk from a tigress and he boldly approached one and milked her. Then there is the experience of Swami Rama Tirtha whose emotion of love was so perfect, that wild tigers used to come and allow themselves to be patted by him. His dominant note actually overpowered the tiger's repulsion for man,

270. Variations of Love and Hate.:—again this superiority and inferiority may be moderate, great or immense; and it is also possible to imagine a relationship of equality which may be slight, average or perfect. Our feelings in each case will thus vary and so with the outward expression in each case as ashown below:—

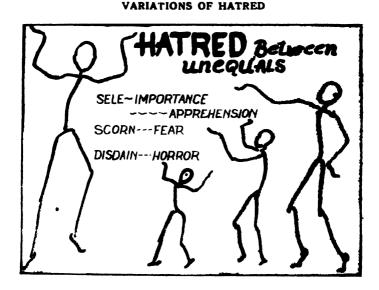
Variations of Love.

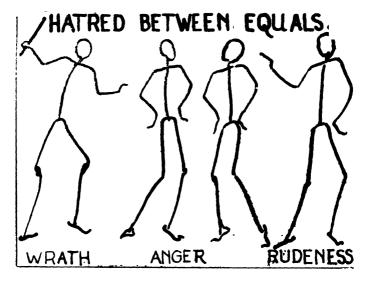




Slight Average Perfect Politeness
Friendship
Conjugal love

Handshake Presents Embrace





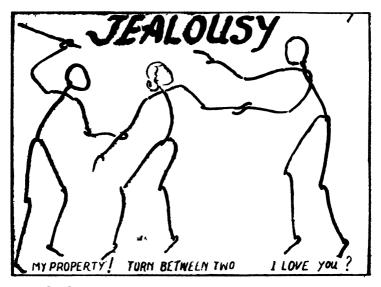
Slight	Rudeness	Keep off
Average	Anger	Sarcasm
Perfect	Wrath	Suppression

These are but simple emotions but our feelings are often complex and Dr. Bhagavan Das in his admirable book on the subject has shown how these can also be fitted into this method of classflying them.

271 Love and hatred for the Jiva, or his vehicles?:—Perhaps it would be easier to understand the complex emotions, if we take into account another fact, which Dr. Bhagavan Das does not bring in, viz., that an individual means the inner Jiva and his vehicles. It is so difficult to distinguish

between the two, that we generally mix them together. In one person's case they might be for practical purposes be taken as acting together: but it is quite possible for another man to love a person's body and at the same time feel an actual repulsion the liva within and vice-versa. Jiva (a man) loves another Jiva (a woman) he would take delight in everything that makes her happy. Suppose the woman is doing something which pleases her very much for the time being, while the man with his unclouded vision feels that it will bring on her great misery in future, it will be his duty to warn her of the danger. Even her passing fancy will create not anger but a kindly response in the man's heart; but he will try to do everything he can to dissuade her from following that whim. Suppose the man is afflicated with a deadly disease like cancer, not yet publicly known he may refuse to marry her and use all his influence to persuade her to marry some one else, or he may even behave towards her outwardly, in a very rude and offensive manner, so that she may be reconciled to the other person. He will do all this, out of pure love for the Jiva, feeling happy when she is happy. A doctor, in spite of the natural repugnance he is bound to feel towards the body of a leper, treats him at personal risk. He may cut open another man's abdomen, binding him down and chloroforming him in an apparently cruel manner. In both cases the emotoin is essentially of love

towards the Jiva, which drowns the mild repulsion for the vehicles.



272. Love for the vehicles.:— Take another instance of a rich man, in the prime of youth, who goes to the Follies Bergere and falls in love at jirst sight, with one of the stars, which shine even in the dazzling glare of the footlights. The Prima donna also discovers that the millionaire is the man God had created for her. She is willing to forego her career, for a quiet life and so they marry. He buys for her a new dress every day, and is delighted to see her literally rolling in velvet and satin. They breathe the bracing ozone of the sea in their own yacht, and in their Alpine villa all the snow-clad mountains, green verdure and wonderful flowers

spread out before them. Their intoxicating scent wafts on the breeze; dance raises them to the sixth heaven and sex completes their felicity. The man dotes over the woman and the woman loves the man, and they are both supremely happy. Is it an attraction between the Iivas or the vehicles? How shall we classify it? Let us wait three months. The senses always are subject to satiation and fatique. The greatest pleasures soon pall on them and the pair are rather and go to a hotel for some company. When the sense-telephones begin to ring slowly, the memory which is always active becomes louder. Fleeting shadows of the green room float before the actress' vision. One of these forms materialises before her in the shape of a handsome lad she used to like once. She is surprised to meet him on the Piazza, but her face brightens up. She invites him to her rooms and introduces him to her husband, who is struck by the light in her eyes. But this fire kindled by the stranger does not give the husband any Pleasure this time. On the contrary, it rouses in him a feeling of repulsion for her friend, who seems to have come to rob him of his love. How can love be stolen? The fact is that the husband is afraid of losing those hundred pounds of precious flesh. He determines to prevent it, and puts a loaded revolver in his pocket, and spends his whole time watching the other two. After threedays' agony, he finds them exchanging a kiss and in

in a second, he puts a bullet into the man's head. The wife gets very frantic; the man falls down at her feet and vows to her eternal love, and repeats that he wants her. She is disgusted and throws herself down from the window. The cold clay, the property of the husband, is again restored to him. He has her—but that lifeless form is no use to him, and he spends the remaining days of his life, in a lunatic asylum, telling the world of his love while his beloved completely cured of any attraction towards her husband, wanders away in space, perhaps with her second friend. That is clearly a case of love for the flesh and the Jiva comes in only in as much, as it is necessary to keep the flesh warm.

273. Love and Lust: Indignation and Hatred:—We thus see that attraction and repulsion, love and hatred can both be twofold—jiva, towards jiva, and jiva towards vehicles, There is a tacit under-standing in the mind of humanity—(whatever our materialist might pretend)—that man is something more than his body, and so every one likes to convince the world that he is not dealing in flesh, but with the spirit within. People therefore do not like to use the words lust, or hatred (about themselves). Our millionaire says he loved the lady, and it was only righteous indignation that made him stop the third fellow from making her unhappy. This sort of thing has given rise to a great deal, of confusion and hypocricy which

makes progess difficult. The first right step therefore is to understand what our emotions are, by using separate words for the two. We should reserve the words:

Love—for attraction between jiva and jiva
Lust—for attraction between jiva and vehicle
Hatred for repulsion between jiva and jiva
Indignation for repulsion between jiva and vehicle.

These can be further subdivided as Dr. Bhagavan Das has done according to the superiority, equality or inferiority of the other jiva, which again may be different as regards different attributes. Thus the feelings of the millionaire in the last paragraph can be put down as:

Lust for the flesh of the woman, accompanied by—

- (a) a sense of her superiority as regards good. looks, for which the man may worship her;
- (b) a sense of his superiority in having the gold which makes him tender towards her;
- (c) hatred towards the third person tacitly admitted as his perfect equal, and hence expressed as wrath.

All these combined together give him intense jealousy, which results in murder. If the third party were a dog, definitely known as an inferior, the husband would not get angry, although he might

feel slightly envious of the attention bestowed on it by the lady. All these factors will enter into the resulting emotions, which generally are very complex. But with these amplifications, perhaps we are in a better position to analyse and classify them.

274. The Vicious Circle:—The emotion. or outgoing response is not an end in itself, but an attempt at reproducing or avoiding the sensation received. For this purpose one jiva may seek to obtain complete possession of the object. as in the case of food, or try to annihilate it as a pest. In many cases that is not possible nor desirable, and so the jiva tries to dominate the other jiva whose presence alone can keep the other vehicle going. Herein lies the possibility of repeated pleasure, as in sex, and that is why sex creates a far greater emotion than food, which can be eaten only once. When desire is turned outwards towards the senses, to the vehicles, it is called Kâmalust, or Tanha thirst. All our passions are derived from it. A faint desire to contact leads to curiosity. an inclination to peep, and if a jiva is allowed to do so, the curiosity may vanish. But the slightest resistence increases the desire, and the word confidential on a cover is enough to ensure a letter being read by many people, who otherwise would not care to look into it. If the interference is greater, there arises the desire to conquer the jiva who stands in our way, and we call it Krodha... anger. The more we are thwarted, the more we dote on a thing and we develop Lobha greed: and this warps our judgment. We become infatuated; we are struck by Moha. That leads to intoxication Mada and it is curious to observe that satisfaction of desires, especially if it comes suddenly and against our expectation, also leads to the same state of intoxication, through pride of our great achievement. Our vision is entirely clouded. We then become jealous. Matsara enters us: reason ceases to guide our actions. After that, the deluge. It is time to break up the vehicles which have thus hopelessly landed us in this mess. Perchance to begin again. That is the road of Vice.

275. The Upward Path.:—The other one is the path of virtue. If instead of turning our desire outwards we look to the jiva direct, our attitude towards life at once changes. We become happy, when we see the other jiva pleased. If he should happen to want anything, we give it and give it freely. As soon as this attitude of love is properly established. says Patanjali, other people forget their enmity towards us, at least for a time. We give away money, and wealth begins to flow into our hands. Maximum pay for the minimum wages was the law of our old-world economics. Henry Ford paid his workmen better and reduced prices: more orders poured in and he got richer at the

same time. Anger and greed became quite unnecessary. The vicious circle is broken. The reign of virtue is established. Spirit has triumphed over matter. Love for the other jiva and repulsion for his vehicle if it is unworthy will yet remain, but lust and hatred will be gone. How to achieve this magic is a problem that has taxed the brains of humanity; but we have the testimony of history that this miracle can be done. How, we shall try to understand?

XXVI Intellect—the charioteer.

- 276. Our Recording Angel:—Quite apart from the feeling of pleasure or pain that sensations rouse in us, inside us there is a recording apparatus which registers every impression that comes in, and files it for future reference. We have already seen how the recordkeeper is in the habit of reading aloud his old records to us, on the slightest pretext. We shall now try to study how the Recording Angel works in his office. He obviously has a staff of very efficient shorthand writers who can take down the messages as fast as they pour in through the five telephones. All notes are written in indelible ink and not even the faintest flicker is forgotten, although at the time, we may not be conscious of it. Thus a Saturday night's record of a drunkard, who had decided never to drink again, would be something like this:-
- "Received pay at office. In accordance with the vow made the previous day at public meeting, started for home at once. Took a different road to avoid company.....but how did these men know of it!.....No, I can't avoid them.....I will face them boldly...... "Yes, I am going home, I am not going to drink any more "......" Come along, don't be a fool "......" Alright I will come in, but I am quite sure I won't drink ".......Went in. Beer?

What fools! "When I used to drink I never took anything weaker than neat whisky." "No, No, I don't want whisky." "But I brought one for you, Sir." "As usual, Sir, I opened a new bottle for you." "Alright I will pay for it, but I won't take it." How stupid to throw away a good glass, and lose the money as well. No, one glass won't hurt me.....but one only......Felt very pleased. A new drink! Let us see. I am now quite sure, I can leave off. Get me a glass. I will take only half of it, and prove to you that I can resist the temptation.....Took just half. "No you don't believe it. Prove it. Prove it. Prove it", I say. " Prove it, you blackguard or shall I....." Thump on the head.....that second glass must have been very strong wine. No. the earth is shaking. Oh! these earthquakes. (Telephones stopped working suddenly.....waited hours) Yes, a throbbing sensation in the head a broken arm Where am I? In my bed! How did I come in here? I had my whole month's pay in pocket. Is it there? No: I have been robbed. By those rascals. I remember now. No, I shall never drink again, and so on, Ouite a number of similar records will be filed before the man really leaves off his drink.

277. The Stenographer writes as he understands it.:—Births and deaths, marriages and funerals, feasts and fasts are all the same to the stenographers. Their business is to write. They

go on scribbling the news, as it comes from the North, East, West and South. We have already seen how our various telephones first of all distort the impressions and there is "fading" as well. The beats are loud and strong both when we feel great pleasure or intense pain, and weak and feeble when they fail to arouse our inner jiva. Then again it is so hard to prevent the record clerks from reading aloud their old files, that the stenographers often mix up the noise inside the house, with the sound that is coming in. So a really accurate and perfectly truthful record of any event is very difficult. we asked all those eight persons, whose emotions after the tram-car incident we analysed before, to write out an accurate account of the accident, we shall get eight different stories, and quite honest ones too. We all look at the world through our prejudices, and prepossessions and our understanding is always coloured by our wish to believe. That is inevitable. If one of these eight persons was related to the injured person his version would be very emphatic, and that is just why a judge, whose object is to get at the truth, would not attach much importance to his testimony. He would select the most disinterested person, i.e., one whose emotions were ruffled the least, and give the greatest weight to his impression, in apportioning the blame. Real truth is impossible until we rise above both pleasure and pain; till then we can only experiment.

278. Association of ideas,:—All the stenographer's notes are at once transferred to the record room. We can understand the filing system followed in this department best by observing the beginning of the process in a child. After birth the child is hardly self-conscious for some time, but soon its telephones get into working order. The food it takes in, is used up in the body, and the first urgent message that the brain gets is that of hunger —a painful sensation. The response is *crying*. a minute the eyes of the baby report the arrival of another person, who takes it up gently (so says the skin) and puts it to her breast. The child sucks milk, and is soon satisfied. It now notes the source of the food more carefully—the mother's form and her face, and being in a happy mood, i. e., with strong life currents, they make a deep impression on it. The only messages received loudly are Hunger-mother-satisfaction; and these are all filed together. We have seen how the record-keeper takes delight in reading aloud his files, and so the next time the word hunger is whispered, he reminds the exchange of the mother; and what is curious is that when the eyes announce the mother a few minutes afterwards, it reads out the chapter on hunger and the child begins to cry. "Hunger-painmother-Pleasure" are so mixed up in the child's memory that any one brings up the other. The ideas are associated.

Another very interesting study is the memory of a borse. Suppose we beat a horse very severely somewhere on the road. It is very dimly conscious of our existence, but it vividly sees the curiously shaped tree in front of it, and the record-keeper in its brain records "that-tree-intense pain in the back." Next time we go there the image of the tree reminds the horse of the whipping, and its reaction is to stop. A foolish driver whips it once again and that only confirms the idea in the horses' brain. Every lash adds to the supposed connection between the tree and the pain, and the creature will naturally refuse to budge an inch, until that association is broken. A wise coachman will therefore get down and pat the horse on the neck. The brain record now runs-tree, pain patting, pleasure; and the animal begins to wonder what is really correct. It will walk a couple of steps and stop again. Another caress confirms the second impression, the new association gets stronger, and the horse will go on without any further trouble. That is why, every wise owner of a horse offer the horse some choice morsels, with his or her own hands the circus trainer always feeds the tigers, and kings grant knighthoods and titles themselves with great ceremony.

279. Memory—a network of channels:— Memory appears to be like plastic clay on which every impression makes a small rut through which life-currents flow, and the passage being continuous, these channels are all interconnected. Our second experience does not necessarily follow the same sequence, but it might touch the first in some points. All these grooves therefore cross, and recross each other, and our whole brain is, as it were, covered by innumerable furrows, forming a very intricate network. When the waters of Life pour into any one of these trenches it naturally tends to overflow into all connected galleries. There is no rhyme or reason in the linking together of ideas, and anyone can verify this for himself by watching the sequence of his thoughts for a few minutes. The following is nothing extraordinary.

"I see a cat—oh, yes. It has come for milk—ten pounds my cow gives—quite. I must arrange for grass—it is so costly—why not get some grazing. Yes, how beautiful was the grass-land at Lonavalawonderful, but it was there I had the accident and broke my arm. Yes—the bandage and the dirty iodoform—I can almost smell it now—no better than a bad privy. Oh, the wreched closet in our house and the wretch of a landlord! He won't improve it—these capitalists, and they want such high rents—of course rent act must be passed—legislature again—but what bad acoustics has the council hall get—our College theatre is very much better—Did not I build it?" and so on. If we recall our dreams, we shall find some most astounding association of

ideas. All we can say is that generally speaking a time sequence can be observed between two succeeding lines of thought and that our thoughts mostly centre round ourselves, all wanderings tending to come back to ME and MINE. Such ismemory, a very intricate network of channels made by previous experiences. That is the function of chitta—that which collects—the filing department.

280. Making a deep rut-Observation: Not all the furrows made in our brain are always of the same size. First of all the depth of a rut depends upon attention—the interest we take in it i. e. the intensity of the Life current. We have already seen how this is affected by pleasure or pain. That is why educational toys make the children happy, and speakers begin by praising their audience and putting them in a pleasant mood, thus securing their attention. A student's mind may wander through his studies for hours, and yet the impressions in his brain will be very faint. If he cannot attend, the reading of books is worthleses and he might as well go out and have some vigorous physical exercise, when his blood will circulate faster and the brain may work better. If we want the memory to retain anything we must make a deepergroove and for this we must secure attention observe accurately—making the fullest use of all our senses. There is a great deal to note in the smallest match-box and to see how it differs from another.

Looking at motor cars to observe how their shape, and contour varies is veay interesting study; and it is not impossible to distinguish between cars of different makes at a glance from a distance. Even the so-called illiterate villagers can by training their observation find out their sheep or camel out of hundreds of similar animals which look all alike, and instances are not unknown of puggys who can follow the faintest foot-prints for miles. It is only by very careful observation that an artist can see not one but a multitude of noses, as he wanders along the market place; and it is by developing the same faculty, that an engineer can visualise beforehand the buildings he is going to construct. Such concrete memory is seldom associated with pleasure or pain, and so is the most difficult. But that is the real beginning of all intellectual training—attention, observation, visualisation making a deep channel in the brain. It is useful to remember that in childhood the brain is more plastic and the impressions made then go down deeper and last longer.

281. Keeping the groove—Recapitulation:—Our mind seems to be formed of matter like pitch, so that a furrow made in it tends to close up with time. Even a ghastly wound will heal after days, and time brings forgetfulness to cover up our greatest sorrows. The impressions then made gradually get filled up; although they never are

fully obliterated. Whenever we go over the same in thought, the waters of life flow through them, and they get deepened again, and so by brooding over our misery we greatly intensify it. Worry kills. That is a wrong use of repetition; but that is the Law. It is only by constant revision that we can keep the rut, and make it wider. If we read for five minutes and then try to recapitulate what we have read for ten, we can remember it much better. In mental repetition the whole energy is derived from inside and so we cannot be inattentive. We try to carry our thought again and again along the groove made by the author in our brain. In hearing a lecture it is possible to be 80 per cent absent-minded; in reading slowly we have to fix it perforce to a greater extent, but we cannot run over the ideas mentally with a distracted mind. Hence the great value of mental repetition—recapitulation -- concentration or meditation as some like to put it.

282. From the known to the unknown:— Now in all these impressions we always notice some sort of sequence in time or space, and events always seem to follow in that succession. So certain associations like George Washington and his axe, or the Gandhi cap and the lathi soon establish themselves in our brain deeper than others, and it is wise to take as much advantage of this as possible. If we are asked to remember the following fifteen

words: "Noise, hand, terror, ink, colonel, thunder. black, ghost, pen, lightning, army, head, cannon, light, skull", we find it almost hopeless. But if we rearrange them like this: "Colonel, army, cannon. noise, thunder, lightning, light, black, ink, pen, hand, head, skull, ghost, terror", it is not hopeless to commit them to memory. If we have to make a number of purchases, try to rearrange them according to the geographical position of the different shops, and mentally go along the various streets, so that we can do all errands in one round. We find the task becomes much easier. In remembering the specifications, for say a masonry wall, we cannot make a mistake if we take them in the order in which the work is done-quarrying the stone, bringing it to site, dressing it, fitting it in place, etc: We



then introduce in the jumble some logical, rational sequence, and link the ideas in a manner, in which they always follow, to lead thought along well-worn paths.

- 283. Value of metaphors and Similes. :-Hence the value of all metaphors, and similes. In the Marathi alphabet there are three letters for "S". and the child is taught to think of one with a tuft of hair on the head, the second with a pierced fat belly and the third that it gets in sugarcane. Thus is the unfamiliar linked with the familiar in the boy's brain making it much easier to grasp things. A very interesting simile is the one in the Kathopanishad, in which the body is likened to a carriage, the emotions to the horses, the intellect to the driver and the Jiva to the owner of the carriage. Many abstruse subjects can thus be made easy in this way, and every teacher ought to take the greatest advantage of this fact. It must however be always botne in mind that all these are aids to understanding, and the simile ceases to be similar beyond a limit. It must not be stretched to absurd lengths.
- 284. Use of stories and Parables:—The profoundest truths have similarly been conveyed in the form of parables and stories, which makes them very easy to grasp. The Hitopadesha is a fine treatise on worldly wisdom couched in very simple form, which catches the attention of even children.

Æsop's fables are famous. Ancient mythologies are all very interesting reading in which the laws of life have been very beautifully illustrated, by applying them to human problems. Whether these stories are actual history or not is a minor point. Even in the Hindu literature they are only known as "Puranas"—old things; and they ought to be taken as such at least for the great good they can do. They are all stories with a purpose—meant to teach some great lesson, in an entertaining form, and are certainly more useful than many modern works of fiction, which only take us along the gutters of Paris and Chicago. These only vividly describe to us the seamy side of life, and appeal to our sensations, without touching the intellect. The others also lead the horses along well-worn paths. and teach the driver at the same time, by arresting his attention and making a deeper impression on his brain.

285. Rhythm and poetry help very greatly:—Rhythm seems to help memory enormously, hence the value of prosody, and versification. Like rivers, the waters of life also do not seem to flow in a constant steady current, but in rhythmical gusts When a child first learns to read, it is very difficult to take out the singsong tone. Why attempt it? Give it poetry and it can follow it quite easily. That is why religious teachings are put in chants. The oft-abused Brahmana has

kept in his head for centuries millions of words of ancient wisdom, all put in verse. To make things doubly sure he strung together every third syllable, the first words of different paragraphs and so on, all again in poetry and that is how he has been able to perform this wonderful feat of memory. Jingling sounds, even if completely devoid of any meaning seem to stick to the brain, and hence the Karikas. I learnt years ago that something happens to a set of verbs "shaklu, pacha, mucha, richa etc." What that "something" is, has clean escaped my memory, but I can run out the string of a hundred verbs or so, without a single mistake, partly because of the reverberations, whereas I have forgotten all prose rules in Bhandarkar's books. In Sanskrit. they versified even the dictionary (Amarkosha) and all knowledge worth remembering was put in sutras, "strung" together in a thread.

286. The faculty of reasoning:—We have seen how our recording angel works, how impressions are made, how they can be deepened, and how we can rearrange them to a certain extent, making the useful ones more pronounced and wiping out those we do not want. A study of these laws—unfortunately not studied in our schools and colleges—is very useful in teaching us "how to study". At the same time it is necessary to consider the why of things. Which furrows should we retain and which should be obliterated

and why? That is the business of a second department in the .brain. We have observed a certain order in which impressions follow each other in time and space; but if we go a little deeper. we find that amidst all the jumble of innumerable experiences, different events come after each other in a definite and invariable sequence. Even the experience of our shy horse was like this: "Strange tree, memory of pain, (horse stops, driver gets irritated) whips horse, recurring pain." The animal only missed the two stages inside brackets. The links are always there, although we do not often notice them. Apples had always been falling, and the earth had always attracted them. It was only the connection between the two that flashed in Newton's brain. Our stenographers do not jot down every whisper and pile up record on record without a purpose. They do it to the end that the second aspect of Intellect should perceive the thread that persistently runs through them. However distorted the vision may appear at first sight, if we look at it carefully, we shall see an Eternal Verity behind it. It must be admitted that this is no easy task, and more often than not, we do not succeed in our endeaviour to see the hand of God or the existence of that Law, if we prefer to put it that way; but all our sages have told us from the house-tops that IT IS SO, and even with our undeveloped and limited intellect, we too cannot help seeing it to a certain extent.

287. Reason-Buddhi, the wise charioteer:--Grooves in our brain which correspond to the unalterable succession in nature are correct, logical and reasonable: all the others are wrong. To search for the former ought to be the aim of our Intellect. because they lead us to happiness. Other ideas bring us into conflict with God's or Nature's laws, and result in pain. We must therefore learn to keep a constant watch on all our experiences, try to wipe out of them those that do not harmonise with the Eternal Verities and to deepen the others. That is the real goal of all intellectual education. collecting and recording sensations in an aimless manner is cramming, whether it is poetry or chemical formulæ. Rearranging them and storing them in the correct order is not cramming, even if we read thousand books. It is foolish to talk of burdening the brain with Eternal Truths. The stomach is oppressed only with undigested food. As soon as it is assimilated it ceases to be a clog and becomes nourishment instead. So it is with the intellect. Aimless reading even if correctly memorised, brings no happiness. We must learn to pick and choose—to discriminate—to see the golden thread or GOD'S PLAN running through them. That is the function of Buddhi-Reason-the real goal of Intellect.

XXVII. How Our Chariot Gets Along

288. The carriage, the horses and the charioteer:—The physical body, the body of desire, and the intellect—these three bodies interpenetrate and are very intimately bound up with each other. Each of them has their organs—specialised centres of activity, and life-currents flow through them with varying intensity. The Inner man who appears to be quite separate form and above all the three garments, focusses his attention now in one, now in the other. We have all experienced how sometimes sitting quietly we are so absorbed in some problem that a friend has to call us ten times, before we "hear" him. At other times get so beside ourselves with anger, which surges through us so strongly, that we try to do things beyond the capacity of our muscles, or without a thought of the possible consequences ever touching us at that time. We also know how a really bad tooth-ache or a splitting head-ache, will blurr the whole world. But all the time, our recording angel has been coolly noting down every impression that came in, and as soon as he gets a chance, he is not slow to tell us, "I told you so". He reads out to us how we passed through a similar experience in the past and how that time too we got very angry with the boss and lost the job; or how our teeth are bound to ache if we do not clean

them properly. This querulous voice is at first very feeble, and we often do not heed it. We suffer. and he pops up again with his "I told you so". We have seen how the intellect, too, can form wrong associations and its advice may land us into a mess; but of the three bodies at least, it appears to be the wisest. At any rate, it is willing to admit its mistakes and to record them as such for future guidance. It is like the charioteer, with the emotions as the horses, dragging the physical body the carriage. That is a very good simile as far as similes can go, and clearly brings out the comparative dullness of the physical body, the brute strength of the emotions, and the feebleness of the driver's body, but the greatness of his brain, by the use of which he controls the horses with flimsy looking reins.

289. Emotions and food.:—Wonderful as is our physical body, it is a poor thing as compared with the emotions, which like the horses can drag the carriage whither they will. The effect of emotions on the physical body is well-known, and yet many doctors of medicine seldom take them into account. Anger stops the flow of saliva, affects the adrenal gland and perhaps increases the secretion of bile. All violent emotions both good and bad quicken circulation of blood, and instances are not unknown of people bursting a blood-vessel under the stress of anger or even joy. Gentle love on the contrary encourages life-processes, and a humble meal

amidst harmonious surroundings of a home, stands a far better chance of being properly assimilated, than the best dinner in a rushing restaurant. Food is not mere carbon and nitrogen. Now-a-days it is recognised that it contains something else, connected with vitality, and hence known as vitamins. But in addition to these, food can have attached to it emotions as well. When the fond mother packs up sandwiches for her boy, she is literally charging them with her love: and her son would do well to eat these cold things, in preference to an indifferently served hot meal. That is why we offer Naivedya-our food to Devas. before we eat. It is not that the almighty, shivering in the clouds as our educated wranglers imagine, needs our rice, but by putting ourselves in that mood of devotion—love for the all-highest—we better regulate our own life currents, impart to the food some desirable emotion and perhaps much more that this can happen as when the bread becomes "Christ's Body." Our religions have always said so and one day even the Royal Society will set their seal on it; but in the meantime why laugh at it? It cannot at least do any harm. Why not give it a trial?

290. Emotions and disease:—Physical disease is caused by poisons entering the system, and to the poisons have now been added a host of bacteria, like those of cholera and plague. We have seen how the police in our blood—the white

corpuscles—rush to the remotest corners, whence these intruders are reported and try to eat them up. In the meantime the enemy exudes some toxins, and these get into circulation. Our system replies. by producing some appropriate anti-toxins which neutralise their effect. So the battle wages till health is restored, or the person dies. All this is no doubt correct but it is not all. Even in a modern army with all its weapons of destruction we have to recognise a thing called "morale", a vague vapourous something, which will not go into a test-tube and vet it seems to decide the issue. So is "vitality" in our body, not the so called vitality that is bottled up in the patent medicines on the market. real vitality comes from within—the fourth dimension, and depends upon our feelings and emotions. Most of the modern diseases originate in shattered nerves, which are only the logical consequence of unregulated and riotous sensations, incessantly coursing through them. These are the: "bacili" which attack our nerves. An exciting scene in a cinema leads to lend longings which. repeatedly indulged in result in selfabuse, and perhaps end in syphilis. Salversan is no doubt a good remedy at the other end, and may be the only means of saving the man's life after he has reached. that stage; but the real cure must begin with the mind where the trouble started. And yet our "scientific" superstitions are so great that it would be only a very bold doctor who would dare refer to

this aspect, in lecturing on the cure of syphilis. Poisons, and bacteria are all real; antitoxins and serums are also useful: laws of hygiene are all true, and must be obeyed; and yet, a well-regulated and virtuous life is a far more potent shield against disease and pain, than all the patent medicines and inoculations in the world. It affects "vitality"—the "morale" of our Army.

291. Mind Cure:—Religion tells us that all diseases begin higher up-with the mind: and if we think of it, we shall see that at least a great many of them do so. These obviously ought to be curable the same way. We have in the west the Christian Scientists, who effect wonderful cures by means of thought and the famous Coué has amply demonstrated the same thing. I have personally seen cases where people have thrown away good. medicine brought from a Doctor and taken some sort of a decoction given by one who never entered a medical College, and got cured. The first mixture was obtained at a crowded "free" dispensary. where perhaps the doctor was intent upon quickly getting rid of the numerous patients and the compounder busy with his "baksheesh" as is not unusual. The second dose was given by a manwho entered the poor man's hut, pretended to understand the case by feeling his pulse and looking at his tongue, showed his sympathy by patting him on the back, and explained to him how after

all only God cured, if He so willed, and man could only help Nature. In another case when a Doctor after careful examination declared that a child was dying, and it was only a question of few minutes the child recovered with a few spoonfuls of water, to which a few drops of medicine had been added, and which was given and taken with God's name on the lips and perhaps in the heart. If I talked of this in the sacred precincts of the Medical College, I would be sent to a mental hospital; and yet every day people prefer a kindly-hearted sympathetic, human hospital-assistant or even a quack, to an M. D., D. P. H., D. T. M., F. R. C. S. sent out by the College. after thoroughly disinfecting him of all undesirable germs, like God, good wishes, and blessings. In the olden days they insisted that only a virtuous person with a kindly and sympathetic heart could be a worthy doctor, and with every dose people were taught to repeat "Ganges water is the medicine and God the only physician " at least with, their lips, and the cure depended upon how far they felt it.

292. Control of emotions:—We have seen that the physical body which justly excites our admiration is but a cleverly-carved clay cart. If we once accept the fact that all diseases originate higher up, it would be comparatively easy to get rid of all physical misery in the world, but we are unable to achieve that end, because it means controlling our emotions, which is a far more difficult proposition.

The simile of the horse is so good that it not only describes the problem but points to a solution as well. One way of checking the horse is to tie up the carriage, or put a hard brake on it, to put some obstacles between the horse's feet, or to chain them up. People learn concentration by holding their hand at right angles to the body, or sitting in front of a smoky fire, or sleeping on pointed spikes, for days and months. With the telephones reporting constant irritation and pain, it is of course not possible to have any bad emotions. This would be quite brave and need some doing. That is why such feats are very fascinating. They do strengthen the will and if carried out in the milder forms, and only for a very short time, such practices might prove really beneficial, but they always have a tendency to harden a man to all emotions, good and bad alike, and to make him self-centered. All that the horses can do is to turn the carriage round and round, and that affects their health. The horses get so effectively "broken", that they are entirely "broke" and famished. With such horses how can we get on with the journey? The first thing to remember therefore is that we do not want to kill the horses, but to control them. The more vigorous and sprightly they are, the better for us, the more useful shall we be. The surgeon must be able to feel the pain of his patient, as if he was cutting his own stomach, and yet he must not allow that to blind his vision, or to make him change one stitch by a hair's-breadth. "Powerful emotions—strong horses, and yet perfectly obedient to a touch of the rein"—that ought to be our goal.

293. Wait a minute and count ten :-Whenever the horses feel jumpy, pat them on the neck, tell them we are going, and fast, only after a minute. Horses soon understand it, and actually enjoy a little frisking in anticipation. With part of the charge thus allowed to leak out, they are much more amenable. While the horses are thus enjoying the run in their imagination, the driver should carefully look ahead and see how many paths open out before him. All roads are generally winding, and like Goldsmith's good natured man, we very often go round and round the same spot. For getting out of a Bhulbhulaya, a maze, we must follow some principal, some law of nature, some Eternal Verity, which the Intellect should have perceived. At any rate, we can try to examine the tracks that lie in front of us, as far as we can, by mentally going to the logical conclusion of everything. Suppose I get angry with something another man says or does to me. I strongly feel like beating him. Wait—count ten. Is the other man stronger? Yes. Is he also short-tempered? Yes. Very likely then, he will give me a sound thrashing himself, and is only waiting for a pretext. No. he is a weakling. But he may complain to my father, who has a long hand. He may even go to court and I may be fined, and punished at home again. These are all the possibilities. But perhaps my intellect will tell me at the same time that this fellow has been maligning people too much, and in his own interests needs to be taught a lesson. I can at least try to do a good thing, and, if necessary I am prepared to suffer for it. If after calm consideration I come to this conclusion, then my obvious duty is to give the horses rein, and go ahead in that way. Time will show whether I was wise or not; and my recording angel will make a note of it, for future guidance. Experience is the only effective teacher; but that is the charioteer's business. The horses have done their duty and in as much as they waited till we "gargled our mouth with salt water," we have proved our superiority over them.

294. Give the horses a little rein:—If we are going south and the driver makes up his mind to go due north, it would be foolish of him to try to turn the norses right about. Every one of us is moving with a great deal of momentum, in a certain direction, depending upon our past. Newton tells us that it would require an enormous force to make us redouble our course; and if we are not sufficiently elastic, we may get crushed by the impact. But even a small pull acting at right angles, and constantly repeated will in time make the body turn in a curve right round, as all heavenly bodies do without losing a bit the original momentum, which is nothing but inertia, habit, emotion. So

even after we intellectually recognise that we have to turn right round, it is wiser to give the horses a little rein. By imperceptibly but constantly pulling them to the right, we will reach our goal much quicker. The way to replace competition by cooperation does not lie in killing the former, but by introducing the second element in every competition. The boy plays, and does his best, but only as a member of a team. He plays for the school, not to win a prize for himself. A boy who likes to stick thorns in butterflies is made a surgeon, and a boy who insists on opening his father's watch is sent to the workshop. People who like power can make very good policemen, and in the present state of society even a man who likes to kill has ample scope for it, in the army, where he can kill, not for himself but for his country.

Barring a few doctors who maintain that moderate drinking improves health, we can take it that a majority of mankind accept that alcohol is an evil, which we should get rid of. How to do it, is a problem which has taxed the ingenuity of mankind. We had at one end complete prohibition in America, with its boot-leggers and speak-easies. However exaggerated the reports of its failure may be, no prohibition can possibly take away the desire to drink; and in fact all "don'ts" increase desire as we have seen before. When the demand is there,

it is quite probable that the supply will come and does come. A man is not going to stop drinking merely because we ask him to pay four annas, instead of three. Picketing by boys or even ladies can never convince people that they ought not to drink. If they do stop for a time, it is only out of respect for the great Man in whose name they are asked to abstain. They keep away only as long as the wave of enthusiasm lasts, and the victims do make up for lost time. A more lasting remedy is to substitute for drink, something less harmful a cup that cheers but not inebriates; and this method was tried in England during the great war with great success.

295. The Carlisle experiment.:— 'In 1915 during the first great war a new munition centre was opened at Carlisle, which meant an addition of 15,000 to the population of the place, which was then 56000. Lodging houses became packed, men slept on staircases and beds were let, on a three shift system. With no home-life it was inevitable that men should flock to public houses. In war days money was no consideration, and the munition workers with their pockets jingling with coin felt like painting Carlisle red on Saturday nights. It was not long before scenes of drunkenness and disorder called for desperate measures. What did they do?

"All public houses were at once acquired by the State and their number gradually reduced from 119 to 65. Food was provided in every place. The staff was the same and well paid, but they got no tips on drinks, but were paid a commission on the value of food sold. For a drink every man had to cross over to the bar and pay cash. Food was served at the table. Fireplaces were provided where a man could come and warm himself for an hour, and leave without taking a penny-worth and no questions asked. No waiter was to ask "what will you have", on pain of dismissal. Gramophones, even billiard tables were put in for the customers; so people often came in to booze, and forgot all about it in a game. In some shops a piano was added and in others were arranged regular concerts, and lectures on interesting subjects. Thus were the shops converted into free and comfortable clubfor the poor. Convictions which had increased from the pre-war 250 to 953 fell down to 320 in a few months, and then to a hundred. "The brute was sobered"; and what is surprising, at a profit to the State. The total amount invested in the enterprise was £ 922,061, all of which had been returned to the State and during 1926-27, the scheme brought in a profit of £ 89,422." That is a. very interesting illustration of what can be achieved by giving the horses a little rein.

297. Little vows:—Another method recommended by all religions is the one of keeping little vows. They may or may not procure of us a seat

in heaven, but they do help us to gain control over our appetities and emotions. The horses naturally do not like these restrictions, with which the old books try to hedge us in from all sides, and that is one of the main reasons, why the modern man hates Religion itself. Many would not mind a God sitting high in the clouds, but if he is going to order me not to eat nice things, well, that is another matter. But from our own point of view these little restraints are very valuable. "Do not eat every Friday, or on the eleventh. Leave off tea for a week every three months, not take sugar for six months. Do not touch the dish you like most for one year. No smoking at night and no alcohol during the days at least for some time. No cinema till so many problems have been solved; and so on." The thing to be done may be very trivial, and yet, if we do it without fail, we have obtained better mastery over our horses. The thing to remember again is that our object is neither to kill them nor to torture the flesh, and so nothing which will do the slightest permanent injury to the body should ever be atempted. up the horses just for a second to see if they will obey us. It is like stopping the train on a down grade to make sure that the brakes are in working order. That is all. The carriage, horses and the charioteer thus interact on one another: the driver daily gets wiser, the horses more amenable to control and we get along our journey, with greater safety and faster if we have not been foolish enough to kill the emotions or cripple our body.

XXVIII Beyond The Intellect

298. The average man of to-day:—A great many people in this world are born in unhealthy surroundings, or they get diseases later; and these have to spend most of their time in attending to their physical body. Many others spend half their life in combing their hair, and looking at their wonderful features. At death the dust on which they doted so much returns unto dust, and all their labour seems lost. A very large majority however live in their sensations and emotions. "Eat. drink and be merry" is their motto. They seek pleasure through the senses. They get a cake to tickle their palate, or some strong wine to make their horses prance a bit. They put their body to rest amidst, soft cushions, and take their emotions on a riotous round with the hero or heroine of a modern novel. or follow their doings better on the screen in a talkie. They even visit scenes of cruelty like bullfights, which strangely enough they enjoy from their safe seats. Others have realised that the carriage and horses are after all unimportant. They will go wherever their driver will take them; and so thev. concentrate on the coach-man. They have learnt that by scrupulously following the rule of the road and" keeping left", they can drive faster and with less danger of coming into conflict with others. They discover that by being temperate they can drink the maximum quantity of wine in a life-time. They too give their horses a little run now and then; but they certainly differ from the people whose horses are giving them a run. The intellectuals have a certain control over their emotions; and such persons generally get on much better, and perhaps their happiness lasts longer than the others. But even they soon see that the body is after all a vehicle and the horses get tired much sooner than the charioteer. The pleasures of the senses pall and the driver has to sleep off the interval, till the horses are ready again. That is the present state of Mankind as a whole.

299. A Rationalist:—A few of these having seen the Laws of nature and the invariable sequence of events in life, come to the conclusion that the emotions do not matter. Their coachman—the all-wise and infallible charioteer feals confident to pronounce judgments and lay down a course of conduct. The dictates of intellect are of course the best guide available so far, and it is perfectly right and proper that a man should follow these; but that is not as simple as many people imagine. Any one can become a member of the Rationalists' Associations, by paying a fee and signing a perfectly rational pledge. But keeping that vow which implies not yielding an inch to the horses, is not so easy. We have already seen how all our impres-

sions are coloured by our individual experiences and how very difficult it is to extricate the Eternal Verities from our thoughts, and feelings. These feelings lead to different emotions, which depend upon our point of view. The same woman is looked upon as a wife by her husband, as a mother by her children, as a sister by her brother and only as a daughter by her parents; and even a Rationalist cannot forget these distinctions in laying down the law for other people. Even if he does not attach the only value to his personal feelings or believes that he does so, it would not be rational for him to ignore the fact that a majority in the world do. If our enthusiastic Rationalists were not so indifferent to the feelings and emotions of people whom they want to convert to their (very right) views, they would get on much faster, because they would be proving by their conduct that the reign of reason was desirable.

300. The coachman discovers a passenger:—Sensualist or rationalist, a day comes to every man when his senses are tired and his intellect having seen as far as it can, he feels convinced that it is not right to talk of the world as a fortuitous concourse of atoms. In spite of many gaps which are difficult to fill, the intellect cannot help sensing some method in Nature's madness—some plan behind the apparent struggle for existence. The more really Rational a man is, the quicker this happens. It dawns on

him that Nature inspite of looking red in tooth and claw and ravages of cholera, is an ordered whole. Besides looking after his carriage and horses, which every beast tries to do. He begins to wonder if he has to play any part in the drama. "Why all this bother? Whence did I come? Whither am I going? Why am I surrounded by millions of other carriages?" These questions gradually become so insistent that he leaves off scanning the horizon for a moment. He glances within, and to his dismay, finds for the first time that he is not alone. He has a passenger reclining comfortably in the coach, who to all intents and purposes behaves as if he was the owner of the carriage.

301. Is he the owner?:—In addition to the function of collecting as Chitta, and reasoning as Buddhi, and having successfully taken the carriage through many a tight corner, and run a great many races safely, the intellect naturally develops a little pride—ahamkara. It cannot meekly submit to the occupant of the car, but his calm dignity is rather baffling. The intellect tries to argue as is its wont: he only smiles. The intellect gets vehement; he only shrugs his shoulders and settles down to read. A man is walking along a road. He wants to go somewhere urgently. As far as his senses report, the foot-path is perfectly clear of all obstacles. The intellect can see no earthly reason why he should not walk along. Suddenly the passenger tells the

coachman to "stop". The imperious command having been heard by the horses as well, they stop before the driver has had time to start his dispute. And lo! with a tremendous thud the wall to the left crashes down on the pavement. If that "booby", in the carriage had not interefered in time the man. carriage, horses and all, would have been buried under the debris. Even the horses have found out that the voice which saved them, came not from swaggering proud driver, but from some one with a silvery ring in his speech. The coach-man feels a bit humbled. Perhaps the Inner man is wiser than the charioteer. Perhaps He is the owner of the whole outfit, of whom some " cranks " have been speaking all these ages. His is the voice of Intuition, the Inner voice of Gandhijee, the Demon of Socrates. the Angel who dictated the Koran to Lord Mahomed, the Flute of Lord Krishna. As this voice is heard more and more, the coach-man accepts him as his Master. The man's personality gives way to his Individuality.

302. The Inner Man essentially for Unity:

Such experiences are not so rare as people imagine, nor are they reserved for the select and elect few. Any one who has his senses under fair control, and whose intellect is not warped by too much pride can hear his Inner voice at times, perhaps when he least expects it. It is only the sensualist

whose horses are too jumpy, and the so-called rationalist, who has developed third aspect of intellect too much, who find this difficult. The Inner man does not demand that all emotions be killed, or that the intellect be silenced. His dictates are no more irational than those of our Reason. Only he argues from his own experience, his own knowledge, his own conviction which naturally form his own premises, viz., that all these billions of carriages belong to ONE household, to ONE OWNER, who has made them for the amusement of his children. To the Jiva this is not a vague hypothesis with which the intellect tries to comfort itself, but an absolute fact, which needs no argument. His attitude towards life is necessarily synthetic; it tends to unity. He cannot countenance any separatist tendency on the part of the horses or the charioteer. As long as the horses "keep to the left" go along the path of love, he has no objection to their rambling amidst all the winding by-ways. He rather enjoys such a drive because the other carriages are also occupied by his own brothers. wise owners he does not like his driver to run foolish races with others because he knows that in such cases the horses often get out of control, and come to grief. He wants his charioteer, to look for opportunities to help other drivers, to co-operate with them, not to compete with them. That is all. As he has to travel he does need the outfit, and prefers a crack one. But naturally he cannot relish the horses getting him into a pit, or his driver quarelling with his brother's coachman.

303. The liva's Eternal Home:—Why has the jiva at all undertaken this travel we shall try to inquire later, but if we believe tradition which has been handed down to us, he does not seem to relish it much, at least in the beginning. Perhaps he acquires a taste for it later. Whatever life he leads in His home, it seems to be far more delightful than what the best of us can have. We have already heard it said (in the Shrutis) "Take an optimistic, determined and virile young man. Give him the whole earth with all its wealth. That would be the measure of the highest human happiness. Make that a hundredfold and again a hundredfold and so on and on. That would give an idea of the joys of those who live in the highest spheres, and of that one who has conquered all desire. " Supreme ecstacy -Ananda-is one of the three essential attributes of that region, and has to be a characteristic of this earth as well. Asking the Devas to go down to this earth of ours is like sentencing them to penal servitude and is looked upon by them as the greatest curse. It appears that a whole host of jivas once created by the Lord, in order to send them down rebelled at the instigation of Narada and refused to come down to this muddy globe, for which offence Narada has been condemned to eternal wandering amidst this choking dust. Whatever these mythological stories really mean, they all imply that the jiva's life in his own home is very much pleasenter than the one he can lead in his travels, which he undertakes very unwillingly. This is the best description we can get, and every attempt at being more explicit is met with the following replies:—
"The intellect cannot grasp it. One can only talk of It in negatives. It is not like anything we know of." Swetaketu pressed further and was told "Thou Art That, Swetaketu" an expression wholly unintelligible to us, except that it connotes oneness—undivided unity.

XXIX The Great Entertainments.

304. The outward journey:-The Inner man is fully conscious of the unity, and so to Him it is all great Fun. There is no struggle, no suffering, but only the awkwardness of having to manage a clumsy coach. He knows that after all his horses are brutes and the charioteer but an uneducated or half-baked person, and so He does not expect too much of either. The mere fact that he wishes to drive in a separate carriage of his own means a separatist tendency to that extent. Creation began with diversity, and the whole trouble is to see the Unity in this diversity. What does the poor ignorant coachman know of the august Father, whose children, all the jivas are? So like a wise owner he is very patient with the coach-man. Whenever he goes out he has his carriage attached to those of two more persons, his father and mother, whose drivers advise and help his own coachman. Later on, when he leaves their company he himself takes a wife or a husband and then children and turn gets his coachman to help their drive again all the charioteers living in a continuation town, a district or a Nation, meet tog to lay down some rules for all. While all the and coachman are thus learning from each or the owner takes it very good humon carriage breaks up by wear and tear of

in a collision he rides the horses, with his syce for a while until the horses drop dead. He knows that the coachman after the mishap, will be more amenable to reason and so walks with him a bit, explaining to him how to avoid the trouble next time. He asks him to select better horses and a new carriage and goes on his journeys again and again in a similar manner. All the time the liva seems to be preoccupied with some work of his own of which the intellect can form no idea, nor does it appear to be the coachman's business. The owner allows him quite a free hand as far as the travelling arrangements are concerned, even feeling amused at his occasional arrogance. It is only when the horses are fairly steady and the intellect has learnt to look for his guidance, that the Inner man begins to take greater interest in the journey.

305. Homeward bound:—Once the Jiva takes the direction of the tour in his hands, things entirely change, because He is always conscious of the essential unity of creation, and knows why he is travelling. The first part of the expedition is called the outward path—Pravritti Marga and now starts the return journey—Nivritti Marga. Not that the coachman is now fully obdient, but he is now much more tractable. The process of getting absolute mastery over the body, emotions and intellect means a hard struggle; but it has its own compensation. Instead of rushing along at break-neck speed,

the man begins te seek seclusion, at least for some time every day; as it were, he gets on to a maidan to exercise his horses by himself. He had been worrying his head so far that he was not a king. He now sits calmly, and tries to be in imagination a king—a kaiser, a czar, or a Duryodhana the mighty emperor of old. He goes to the logical conclusion of the czar's life, and kingship loses all its charm, for him. Even the good kings Dharma and Rama Chandra were not exempt from suffering and after all how long did they rule? He then begins to realise that the pleasures of this world are but fleeting. They turn to dust and ashes in the mouth—they are impermanent, Then the intellect suggests: "Why not imagine yourself to be a king and refuse to die?" That is a very good solution—these are the delights of Swarga, paradise. They last comparatively longer, but they lack the solidity, the momentum which earthly joys have. And even they pall. This discrimination between the short-lived and the enduring, at first leads to disgust (Vairagya) and a longing to have done with the whole show, (Mumukshatva) to get liberated-to go home. He therefore begins to train his horses more vigorously.

306. The Jiva is "at home" everywhere:—But a little calm consideration brings home to him the fact that he has already wandered far from home. He is thickly surrounded by millions of

carriages all moving hither and thither. They are not yet disgusted with their life on wheels. How can he ignore them all? Even if he retires to a forest, they are all sending him their thoughts. He can not help their cries of pain reaching his ears, any more than he could keep out the hooting of the motor horn when he was himself on the road. The coachman now having heard of the glories of the Master's House wants to go home, but the Jiva cannot forget that after all those who are struggling, and suffering are his own brothers. Why not take them all home so that they can have a grand family gathering? After a little hesitation the charioteer also falls in with the idea and swears allegiance anew. They all go about pointing out to the other drivers the great advantage of going home, or at least of scrupulously following the traffic regulations—the Law by which traffic is held together - Dharma-Religion (both words come from the same root). They go on shouting, asking, pleading, entreating people to kindly "keep to the left". Of course they never break the Law; the horses are under perfect control, and the coachman perfectly wide awake and vigilant. They see the fleeting nature of the world equally well, but out of love for the fellow brethren disgust has now given way to dispassionateness—true Vairagya. The desire for personal liberation now means liberating the Inner man from the disabilities imposed upon him by 'the disobedient driver, unruly horses, and the rickety

carriage—true Mumukshatva—better translated Love. The Jiva now does not want to "go home". He is "at home" wherever he is.

307. He accepts an office:—All this time the Father of all the Jivas, called Shiva who created the whole world for the amusement, and instruction of His children has not been idle in the clouds, as some people complain. He laid down all the Laws of, Nature and He sees that they are all invariablyfollowed, perhaps through the agency of a set of officers, known in our religions as angels or Devas. the shining ones. He knows that experience is the only effective teacher, and so He allows all his children to wander about freely. They break their carriages. He patiently mends them, or gives them new ones. The horses die. He gives them the choice of others. He continually broadcasts the rules of the game, though the children do not heed them, as the jivas are in the beginning sleepy and preoccupied and later engaged in teaching their drivers. In the case of the jiva who is at home every-where, the struggle is over, and He now has time to play with his wireless receiver. He does not need to listen to the rules of the game, and so on turning the knob He discovers that the Father wishes for his help. So instead of merely going along persuading people round about him at random, he now studies his Father's Plan and does the work assigned to Him. He accepts an office in His Father's household.

308. The Inner government of the world: We are told that the Father Himself only watches the whole game, and the actual administration is in the hands of these Elder sons. being a fortuitous concourse, it is perfectly systematised. At the head are the trinity of chief ministers corresponding to the Priest, the King and the General—the Teacher, the Ruler and the Manager. The king coordinates all activities and exercises general supervision over the whole evolutionary process, en masse. He is given Archetypes by the father, and he tries to mould the different races after them, guides them to their respective homes, allows them to set up kingdoms and empires and breaks them up when the time has come to pass on to the next lesson. So under His eye our humanity has now evolved a fairly good physical body, our emotions are well-developed and our intelligence is being sharpened. Its third aspect—pride of individuality is beginning to function effectively and hence the present-day troubles. These are all very essential and necessary. When we take the next step and develop our Intuition and sense the Unity. of the whole creation, the diversity will lead it additional charm. That is perhaps the purpose of the whole thing. The second Minister the Teacher explains to all, the rules of the game, working from one end as Science and the other one as Religion. He expounds how everything is governed by the Eternal Law, of which Newton's Laws are only an interpretation suited to three dimensions. Third Chief Minister looks after the details in his various departments.—Applied Science and Art. physical and superphysical, as in various ceremonies. and sublimation of Emotions. These mighty Ministers have their Lieutenants, and a whole staff of permanent officials, and seven departmental headsknown as Devas or Angels. Many of these do their work from the central offices, but a very large number only ride, like our mounted police, because that gives them greater mobility in directing the whole traffic. They seldom, if at all, travel in carriages, and that is why we do not meet them in our daily life. Some of these subordinate officials coachbuilders, carriage-repairers, grooms, traffic police, etc.: do make mistakes occasionally as happened in Mandavya's case, but with wireless, and television fully developed, all these are detected at once and righted. Such is the Inner Government of the world, which maintains perfect Law and order, and thus secures to the citizens the maximum liberty. It is only in the exercise of this freedom, and in learning to use it well, that man bungles so much we have famines, devastation and wars; and this naturally raises grave doubts in our minds as to whether all these are not mere fibs of our imagination or bablings of a child humanity. But our sages have told us from times immemorial, that The Inner Government exists, and its laws are never broken.

309. Our outer Governments:—In fact all our constitutions are all modelled after the Inner government, and are our crude attempts at copying them. We fail so often and so miserably and that is why we find it so difficult to believe in the very existence of a well-ordered Universe. Why is it that we all go wrong, when the Inner government is said to succeed? Have we not seen that amongst them no one is invited to fill an office, until He has his body, emotions and intellect under absolute control, and to whom the Unity of Life is not a theory, but an indisputable fact. To such an officer any two fighting persons are like two fingers of his own body. How can he be partial to one of them? He knows that the two jivas, his younger brothers, do not want to quarrel. Their foolish horses have got entangled and the coachmen have got out of hand and are, wrangling and blaming each other for the accident. He will help the boys to samiao their drivers: but if they are too excited, He gets his brothers to leave the carriage and go home. His father's policemen will at once clear the crowd, and empty carriages are not allowed to loiter. One Law of the Universe is that a turnout discarded by one son is never engaged by another, and so the horses die for want of food and the coachmen, now repentant, go back to their respective masters, who in the meanwhile have been resting in the Father's mansion. That is the way the Inner government regulate their traffic. All the

Our outer governments are run by clever coachmen. Is it surprising that we fail? How can people whose own emotions run riot lay down the law for the control of emotions? It is futile to expect representatives of Mahomedans and non-Mahomedans to compose their differences. Only persons like Guru Nanak who after serious thought came to the conclusion that "their is no Hindu and no Musalman", can do that. Emotions govern the body. Intellect can control emotions. Intuition with its spirit of Unity alone will curb the intellect, and get the best of it. That is why the old sages asked a king to subdue himself, before conquering others. We do not succeed, because we do not keep this in mind.

310. Why all this bother?:—Amidst all this hubbub we often ask "Why all this bother? Can we not end it?" Sometimes some of us even attempt it by committing suicide; but presumably that solution—which is the logical outcome of materialism—appeals to very few, and only when misery has deranged their minds. A little thought will convince us that we ask these questions only when we have bumped our head against some hard thing. We have all the time a subconscious feeling that there is a God leading a very delightful existence somewhere in the clouds while poor "me" is suffering here, and so we ask "why did God create this world?" Is God responsible for our pain?

All that He has done is to lay down certain definite Laws which cannot be broken with impunity. There are Laws for the physical world, and how often do we ignore them in our eating and drinking and come to grief? There are similar Laws which govern the Emotions and the Intellect-known as Laws of Morality and Science. If we disregard them we suffer, and who knows everytime we have pain our Father in heaven does not feel it more acutely? Only knowing that it is only transitory He does not take it too seriously. Our Father has written out a beautiful story and he wants his sons to put on garments of matter and stage the play so that we may all enjoy it more. In our eternal home matter is like light wool, a ball of which will not go far, however much you may exert. A strong man would prefer a tennis or even a cricket ball. gross earthly dust being heavier, gives greater momentum and intensifies the joy a hundredfold. That is why He created this earth, and wants us to come here. We do not like it. It is a bother, our costumes are so clumsy, but our Father knows that when each one of us has learnt his role, and when he plays his part perfectly, we shall all be very very happy. That is why the individual problem is the world problem, and we must take heed of the ancient advice "Man, know thyself". When we have all done this thoroughly we shall never ask; "why bother". and be really thankful to our Father for it, perchance to leave Him, to found a new theatrical troupe of our own on some other speck of dust and enjoy the fun once again.

XXX Is it all an Illusion?

311. Diversity a delusion:—We have seen that the whole problem of Evolution set before us is to realise Unity in the Diversity, because we are told that the Unity is a fact, nay, our sages go further and proclaim that that one alone exists. Everything else is a delusion. They point out that to a jaundiced eye the whole world is yellow. A large building appears as a speck from a distance, and grows in size, if looked at through a glass. To one travelling in a train the trees appear to be in motion and on a cloudy night, it is the moon which seems to move amidst steady clouds. And yet we all know that the world was not yellow, the building never changed its size, the trees did not move, and the moon was steady and not the clouds. The wise men of old, tell us that the whole diversity is a similar delusion. As on a dusky eve we may mistake a coil of rope for a serpent, and be actually frightened of it, or even try to run away from it, so do we react to the phenomena we see. All that happens in space and time, all our Laws of causation exist simply till we realise that the serpent is only a coil of rope. After that I suppose we have a good laugh at ourselves; and then nothing exists except one—of which no description in words'is possible, except that it is Intense Bliss It is beyond Time, Space and Causation.

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312. Is it so absurd?:—All this sounds so much nonsense to our ears, and yet any earnest inquirer cannot help being struck by the ring of sincerity pervading all these teachings. These Teachers do not appear like propounding a theory, or trying to reconcile some little discrepancy with an old hypothesis, as do our twentieth century scientists. On the contrary, they laugh at such persons "who consider themselves staid and learned and go about deluded with a faltering step, blind leading the blind." These are strong words, and a "Twentieth century Doctor of Science" with all the poison gases he has invented, might with justice feel aggrieved at them. But a seeker after Truth cannot afford to take offence: he has got to account for every phenomenon, including this rebuke. Perhaps afterall the kindly Elders do not mean to insult our intelligence. If they do why should they have taken all the pains to write so many books themselves to explain to us, how to overcome this illusion, the existence of which, they never deny. They know that while it exists, it is intensely real, like the tiger in the dream. only want to wake us up. Theirs is only brotherly banter to goad us on to greater efforts. In their eyes we are but children, and did not one of the biggest of us consider himself as a boy playing on the sea-shore, and diverting himself now and then finding a smoother pebble or a pretty shell, whilst the great ocean of Truth lay all undisturbed. We

get our doctorates only by describing the appearance of a portion of this pebble, and perhaps the same boy Newton who has been wading through the water a bit, in the body known as Einstein, has drawn our attention to a wonderful jelly-fish, which now evokes the admiration of the whole world. This new discovery is taking us fast to the assertions of our Savants. Instead of swearing by Newton's pebbles therefore, it behoves us at least to inquire, if it is all really so absurd.

313. Space and Time—the old view:—We have already seen that all our knowledge of the phenomenal Universe is derived through our five senses, and we are not aware of anything, which they have not reported. Our eyes show us objects in front of us. Some of them occupy more room, in our picture than others; they extend in what we call space. If we look at the objects steadily we see further that they either change their relative positions, or their very nature alters if we give them sufficient something, which we call Time. We. wanted to be exact in recording our sensations, and, so we agreed to measure all extension in space by a. certain standard of length, and time by another convenient unit. Our physicists devised for instruments, with which we could make accurate estimates of both, but estimates only, correct within certain limits. All matter was composed of atoms, and they had definite dimensions of

their own: extension in space was a property of matter and this had nothing whatever to do with time. This was self-evident, and required no proof. Was it not on that hypothesis, that the West had succeeded in discovering enormous sources of Power in coal and oil, by the wielding of which they obtained mastery over the whole world? Everything in the Universe was a machine and could be explained in terms of fly-wheels and belting. Space and time were quite distinct, and ruled the world jointly like two brothers, but each one could be conceived of as a separate entity. Of these Space had succumbed to Man's foot-rule and Time danced with his second's pendulum.

314. Space and Time after Einstein:—But one day the indivisible atom on which they had banked for a century burst into fragments by the discovery of Radium, shaking the very foundations of the mechanical theory of the Universe. Einstein completed the rout by pointing out that every measurement involved "from and to" and these words meant motion, which was impossible without time. "How can any distance be measured without the observer moving his eye from one end to the other "he asked; and "what if the observer himself moved in the meantime?" Two events happening on the Sun at an interval of exactly one minute according to the watch of the scientist on the Sun, would appear to occur at a different interval, to an

observer on a planet moving towards the Sun, with a velocity comparable to that of light. And so Time can become Space. Time exists only because of our inability to see everything simultaneously. It is a limitation of our consciousness, not a property of the world: and once we accept that Time and Space are convertible terms, we have to admit that it is possible to reduce Time to zero. There would then be no past and no future, all an Eternal Now—for a Consciousness suitably modified.

315. Can consciousness have degrees?:— Can consiousness be modified? Can it have degrees? That would be a very reasonable question. Let us see, if there is any evidence to show that it can be limited and can expand. We know that everything living differs from the non-living, by being endowed with some peculiar properties. In the tiniest bit of living protoplasm chemical combinations and decompositions are effected more extensive in range than any which a chemist can cause to occur in his laboratory. The little cell grows and multiplies by fission. What is more to the point, it is conscious; it responds to stimuli. As soon as it comes in contact with a foreign body it protrudes portions to enclose the particle. So much of it as is digestable is digested; the remainder is extruded. The amœba is conscious, but only of what comes in immediate contact with it and that too very dimly. It may try to eat up another

amœba which itself threw off a moment before. It shows irritation, which might amount to sensation, a certain choosing between the pleasurable and the painful, but no memory. To it, the whole Universe with the exception of the speck in contact, simply does not exist. It is as it were moving along one line in Space, the rest of the world having only a potential existence, which it might contact with in Time. It is conscious of only one dimension in Space, everything else being Time. We might call it a one-dimensional creature. The Universe it lives in is by no means one-dimensional. It is the animalcules consciousness that is so limited.

316. Higher Animals:—Let us now take some of the higher forms of life, which have developed special organs like eyes, and ears, and which show memory. These have complicated bodies including a very large number of animalcules. The chemical changes go on as before. The body grows. The animal reproduces itself. Its sensations are more defined. It feels pleasure and pain more acutely, and remembers it. It responds to external stimuli; but these are now greatly mixed up with its own memory. We saw before how in the horse's head an association was formed between the strange tree and the beating received. Our child in the earlier stages was no better, in confounding the mother with hunger. Thus animals can do, or

can be trained to do various things. Spiders have been known to put in some extra threads running in a direction opposite to that of the prevailing wind. Rats and mice will learn to find their way to the centre of a Labyrinth, without taking a single wrong turn. Birds have been seen to collect together in a garden for feeling exactly at quarter to ten every day, even after "Summer time" had begun. and the hands of the clock had been put forward an hour. Monkeys will pile up boxes to get at a banana hanging from the roof. A dog was trained to go to the station for a paper every morning on week-days, but on Sundays it would flatly refuse to obey. An elephant was taught to take pennies from visitors, to put them one by one in the proper place in a slot-machine and to take out and eat the chocolates that come out.

317. Sensation and perception:—A number of such instances are on record; but there is no reason to suppose that they show any reasoning power behind it. Most of these intelligent things have been proved to be results of accidental discoveries, which are no doubt recorded for future guidance. Rats and mice will forget the labyrinth after some days. The birds obviously followed the usual work of the garden such as sweeping leaves etc., which went on exactly the same before and after the clock was advanced and formed an association with the approaching visit of their hospitable

friends who brought them grain every day. The dog saw that the Sunday routine was different and adjusted itself to it. The elephant learnt that it could eat chocolates only that way and so on. In all cases there is no doubt a feeling of pleasure and pain, and along with it, is recorded a perception of what brings that pleasure and pain. That is animal psychology and all animal trainers take advantage of it. They begin by starving a lion and then giving him a morsel of food immediately after he jumps across a table or does something else, they want him to do. All this is a laborious process and takes time depending upon the creature's memory. But once a link is formed between the trick and the food, the lion or monkey will willingly jump ten times, if necessary, and earn what gives it pleasure.

318. Animals have no concepts and no language:—Animals thus have sensation and perception, which includes memory but each one of their perceptions and experiences stands by itself. They can put two things side by side; and can understand which of the two will give them greater pleasure; but they cannot place two perceptions, side by side. Given material, a monkey will try a number of experiments with it and find out what is profitable; but it cannot experiment with "pictures in its head." It has definite emotions like anger, fear and even love, and it also has different

sounds for expressing these. Animals can and do communicate with each other: but they convey only sensations, emotions or warnings. They cannot think. They cannot generalise from the particular and they are unable to compare and synthesise ideas. Just as we cannot drive a tunnel through sand, without at the same time lining it with brick, thought cannot proceed without language which in its true sense animals do not possess. All sounds produced by them are "exclamations"; but they cannot form a sentence with these. They have no concepts; because even a rudimentary conception is impossible without language, as Prof. Max Muller has shown. As he puts it: "By no effort of the understanding, by no stretch of imagination, can I explain to myself how language could have grown out of anything which animals possess, even if we granted them millions of years for that purpose. " *

Professor Schleicher an enthusiastic admirer of Darwin remarked once jokingly, but not without deep irony, "If a pig were to say to me 'I am a pig,' it would ipso facto cease to be a pig." This shows how strongly he felt that language was out of the reach of any animal, and constituted the specific and exclusive property of man. "†

Science of Thought by Prof. Max Muller
 Longmans (1887) page 163.

[†] Ibid. page 164.

And in another place, even Schopenhauer, who had a very high opinion of dogs, stated without any hesitation or qualification, 'that it is this function of forming general concepts which explains all the facts that distinguish the life of men from the life of animals." †

It is not a mere question of degree; it denotes a Consciousness of an altogether different order. Animals seem to undergo an additional expansion of Consciousness when they become humans.

In saying all this, I mean no disrespect to the poor dumb creatures. I only wish to point out the enormous limitations under which consciousness works in them. Do we not see how human babies work in a similar manner until their apparatus begins to function properly? We know how they cry and howl and how they confound hunger and mother. They begin to think, only when they laboriously form their first sentence. Deprived of language, man can do no better than other animals; and Akbar* proved this by shutting up twenty suckling infants taken from their mothers on payment. in a secluded place far from habitation, where they should hear a spoken word. Well trained nurses were placed in charge who were to refrain from giving them any instruction in speaking. After

[†] Science of Thought by Prof. Max Muller (1887), 178

^{*} History of India by Elliot and Dawson (1873) Vol. Page 533

four years they were all found to be dumb—and the house where they were confined is still known as the *Dumb-house*. In all such cases, the defect lies in the apparatus not with the consciousness, and dumb-mutes can develop the power of thinking to a certain extent after they learn lip-language. But even then it is wellknown how they can never compete with the blind, who have the full use of speech.

319. Nothing solid without "conceptions:"— Our eyes which report to us the existence of the outside world throw on our retina only a flat picture of it. However near we may be we can never see a table or a chair as it is. We see only a very distorted flat image of it and no more. The impressions from the two eyes, combined with the reports from the sense of touch from our hands, enable us to "think" of a table. Blind men get an idea of solidity with their hands; and it is on record that to a blind man restored to sight, all distant objects which he had never handled appeared quite flat and it took him a long time before he could "think them into solids." It is Man's power of forming concepts which gives him the ability to interpret the impression. In studying the eye, we have already seen that it is not a very easy process. Whatever a man can thus grasp at a time becomes to him his Space; and everything else is Time, which. unfolds itself through motion. Now all motion is:

relative, and looked at from a point (our eye) it must necessarily be rotational in character, and be perceived only by a change in the relative position of objects in view. When we walk along a road, this change does take place, but we know in our head, that it is our body that is moving and not the houses, and we can apply the correction up to a point. But when we are moving in a fast train although we know equally well that we move, still the trees seem to run a race, overtaking each other and whole fields come to us, rotate round us and pass on. Because there is nothing else to compare it with, when an aeroplane dips, it is the solid earth, which rushes up to meet it, and the Sun and starry heavens go round and round exalted "ME," on my speck of dust. We can think, can know and yet these changes following each other in quick succession leave us no time for applying the correction. How much more difficult must it be for an animal, which cannot think?

320. If we were horse? If our reasoning is correct all animals except man would have a two-dimensional consciousness. They have a to and fro, and a right and left—only two directions in space. Everything else in the world exists for them in Time and they can get at it, only by going to and fro. Some images evoke a sense of pleasure out of the memory, others of pain; but to an animal each is a separate impression. A horse will learn to dis-

tinguish its house from a railway station, because the one is associated with food and shelter, while the other one is a very crowded place, full of noises and strange shrieks. Streets are known by places where it habitually stops, but for it each one is a different phenomenon, which recurs every day. Every day a new Sun rises for a cock, as it does to many very primitive savages; and when a cock crows it is not to rouse the Sun but to herald the birth of a new one. In a solar eclipse at ten in the morning, all birds will return to their nests, because it gets dark, and evening has come. As we have seen before, an animal can see only a flat world because we see no more, and it cannot "think" it into a solid; and a circular disc and a sphere will be the same until it moves. The most curious result of this will be that whenever it moves, to its consciousness the whole world would appear to move. When it runs, it would be the street and the houses that rush in towards it very much like the dissolving views we have seen in a cinema, when the villain from a speck in the distance grows suddenly before us into a close-up. That is the sort of world animals live in. Every time a horse turns a street corner, it is the row of houses that rotates. If a horse approaches a sphere something would appear to come out of the point nearest to it, and move out quickly towards the circumference in all directions. This would not happen to the disc. It would be possible for a horse to get an idea of the velocity

with which the stationary houses appear to move towards it, which is really its own velocity. But a rotating wheel would be something incomprehensible. Even if it stands quiet, the wheel would continue to turn, and this would look like making faces. To a horse therefore all objects which move in our opinion are something inexplicable, something "living." A kitten plays with its tail, which moves by itself and seems quite different from the table and chair. To bullocks a motor-car is a curious hissing animal, and a railway engine is a terrible snorting fiery horse. Even to man, a moving sign or S-H-E-L-L coming out in fiery letters out of darkness, are more fascinating than the most elaborately painted advertisement on the wall; but when we think of it, well, they are both traps laid out for the unwary.

321. Three distinct stages; but why three only? We have thus seen how the world would appear to an animalcule, which has only reflex actions, but no memory. An animal with better defined sensations and memory, can "perceive" a great deal more. To a man with his sensations, memory and reasoning, his power to form "conceptions" which he clothes in language, the world takes on an entirely different meaning. And yet the Universe in which the amœba, the horse and man live is exactly the same. The first is conscious of only one dimension in Space "forwards and

backwards". The second can in addition feel whether it is turning to the right or left. Man can imagine an up and down as well. The amœba can thus be said to have a one-dimensional consciousness, the horse two and man three. Everything else that does not come within the creature's purview exists only in potentiality and requires Timefor its unfoldment. We have seen how a horsewould impute motion to perfectly stable objects. and even how a thinking man gets bowled over in a fast moving train. What guarantee is there that all the accurate measurements of our physicists, and the properties in Space which they ascribe to various objects are absolutely the last word? have tried to show that these differences between. the amœba, horse and man are not questions of: degree, but point to sudden expansion of consciousness into different orders. One, two and threewhy not a four-dimensional consciousness, or even five and so on to "n". Why not? But I must again point out that we are not talking of a onedimensional world, as different from Hinton's flat land or our solid Universe. That way of thinking is useful to a certain extent but is very misleading. We all live in a world of "n" dimensions and it is only consciousness that is limited to one, two or. three-dimensions of space, and everything that exists in the next higher dimension appears to us as Time, which as Einstein has shown is convertible into Space and vice-versa.

322. Gravitation the next key:—Supposing it is possible to expand our consciousness so as toinclude four-demensions of Space, it will be useful to speculate in what direction this advance will lie. We are conscious of three dimensions, which means volume, and then of density. That gives us the Mass. As all masses in our world attract each other we have gravitation and weight. All matter has mass and we do not know any that has no weight. So our three-dimensional world is bound up with gravitation; and gravity is our Real Master, and at the same time the tyrant, who limits our consciousness to three-dimensions. What is gravitation? It is presumably a force, but if its action was like that of positive and negative charges of electricity attracting each other, then the myriads of tons of rain we had during centuries past would have neutralised the earth's weight by this time. No. Gravitation is not like that. It is force: and it acts at a distance. How and why? We frankly do not know. It is only after Einstein has modified Newton, that the attention of the modern scientist has been drawn to the problem; but many of our Rationalists who still swear by Darwin and Ingersoll have not yet heard of Einstein, Ouspensky or even of Eddington,* a sane professor from Cam-

Nature of Physical world.

(Cam. Uni. Press.)

^{*} Eddington; Space, Time and Gravitation.

Ouspensky: Tertium Organum (Kegan)
Jeane: The Mysterious Universe.

bridge. These thinkers feel convinced that gravitation is a dynamical phenomenon, and that if they find a key to gravitation, they will unlock the fourth-dimension with it. It has been suggested that the whole Solar system (and perhaps the whole Universe) is like a huge Crookes vacuum-tube. with the Sun as the anode, at which the planets which act as cathodes are continually sending tremendous streams of electrons. It is now admitted that matter can break up into electrons, and if we are losing such large quantities every minute, obviously the same matter must be returning to the earth in some other manner vet unknown to us. Myriads of tons of matter getting in by the backdoor, without our proud "Scientists" being aware of it!! All this may be quite true and useful: but again let me point out that what we are seeking is not a fourth dimension of matter but an expansion of our consciousness, not a mere growth. We have already seen how animals seem to undergo such a expansion when they become humans. Perhaps we have now reached a stage in human evolution where one more expansion is now due. for those who are ready for it.

PART III

XXXI Morality—Practical Scientific Religion

323. Looking backwards:—We started this inquiry by defining our attitude to the deeper problems of life, which do confront every one of us, sooner or later. We saw that there are a very large number of facts which cannot be explained by Modern Science, whatever its achievements in other directions may be. We were forced to the conclusion that there must be a science of the Unseen —relating to Forces acting in Worlds which can not get into our test-tubes. As True Religion is really founded on these, we tried to pass in review before us, what the principal religions had to teach us. Such a broad birds-eye view of the wide world. should have created in us a strong desire to look within ourselves. And so, in the Second part we probed into ourselves from various directions and collected together a great deal of information about the working of our Inner Nature, which would enable us to see how the different forces work. We have deliberately circled round and round our varied problems, because what strikes one may not appeal to another, who may be struck by another aspect. All our reading, our thinking, understanding and Philosophies would be worth nothing, if

they failed to give us any guidance for our daily conduct. So we now devote this Third Part to Morality ... Practical Scientific Religion—a Morality which has behind it the Laws of Nature—Seen and Unseen.

324. Morality is Relative:—Morality is relative. What is correct for one man at a certain stage of Evolution, will not be right for another: and even for the first one, what is permissible under one set of circumstances may not be allowable at another time. Duties differ so greatly (Para. 118) that it is not possible to lay down hard and fast rules of Conduct true for all men at all times. We can only try to understand the Laws of Nature which decide the relation between cause and Effect, and so that we may set going adequate forces to get the desired result. This is exactly what we do in the physical world; and that is how we have achieved so many wonders, not dreamt of by our ances-But on the whole these discoveries have miserably failed to make mankind happier, because they do not give us the Laws of Human Relationship. Out of a fortuitious concourse of human beings we have now evolved some system, our Civil and Criminal Codes, with the help of which we can maintain Law and Order to some extent within the borders of one State. But the Relationship of One State with another is vet far from factory; and we have frequent upheavals which

threaten to destroy mankind. I am taking it for granted, that those who read this book are already good law abiding citizens, but not being fully satisfied with things as they are, they are seeking a better solution. For them I suggested at the end of Part I (Para. 191) that no better way can be found unless they are prepared to accept, or at least to assume Unity of Life and IMMORTALITY of the JIVA as a fact, in addition to Newton's Laws which have stood the test of three centuries. This is no more than UTILITY combined with oneness of Life and IMMORTALITY, which gives us the Key to our relative position in the SCHEME of the UNIVERSE.

325. Do unto others as you would be done by:—All reading or listening to talks is like eating food, and is a necessary step towards the nourishment of our mind. Our physical food goes into our stomachs directly; but we are still at the stage of Ruminating animals as regards our mental food. We store what we read or hear in our memory and then brood, or at least should brood over it, sorting out our impressions into "Likes and Dislikes" and "Eternal Verities." We then send down some of these into our mental stomachs, where they are digested, giving us our convictions, the blood-supply to our mental Muscles. We make up our mind: we act: and thus does Knowledge become Power. If we have correctly understood the Law and have

acted in accordance with it, even if the immediate results may not be pleasant, the action proves beneficial in the end. Now it is possible that a person may not be sufficiently developed to understand the rationale of the Law, but may have enough faith in the word of some one he respects, and so he may accept his dictum at once and act upto it. This will have the same result, except that it will not strengthen his understanding. For such people, wise men of old have provided a number of Moral Rules in Tabloid form. Not that everyone of these Proverbs is a Law of Nature, but they often contain more than a grain of truth. Of such Sayings, "Do unto others as you would be done by," perhaps stands out very prominently. If everyone followed this simple advice, and paused to think of the result his action will have on others, and to ask himself if he would relish a similar result to come to him, I am sure the sum total of happiness in the world would distinctly increase. "Count ten before you act," is another rule, and so is "Behaviour is Righteousness." Every country has a number of such Sayings and Proverbs, which contain the essence of the wisdom of the Race, and a great many of these Maxims have their equivalent in many Languages, and so are of universal application.

326. Religions have their "Dos Dont's ":-All Religions lay down a mass of such instructions for their followers: but of these there are often some, which are of Local application, under a certain set of circumstances. So at least where a particular advice is common to many Teachers, it can safely be taken as being of Universal Utility. At any rate, these rules are all worthy of very careful consideration, before we are justified in rejecting them. Of such Precepts, I shall refer only to "the Buddhist's Five Vows," as being very simple and comprehensive:—

- (1) I promise to abstain from taking the life of any living creature.
- (2) I promise to abstain from taking anything with theirish intent.
- (3) I promise to abstain from the evil indulgence of bodily passions.
- (4) I promise to abstain from falsehood.
- (5) I promise to abstain from any intoxicating liquor or drugs.

Sir Edwin Arnold has very beautifully translated these with a little comment, thus:—

"Kill not for pitty's sake, and lest ye slay
The meanest thing upon its upward way:
Give freely and receive, but take from none
By greed or force, or fraud what is his own:
Touch not thy neighbour's wife, neither commit
Sins of the flesh, unlawful and unfit:
Bear not false witness, slander nor lie:
Truth is the speech of inward purity:
Shun drugs and drinks which work the wit abuse:
Clear minds, clean bodise need no Soma Juicees."

Another very concise statement, which may be styled "Practical Scientific Religion" is the little book, "At the feet of the Master" by Mr. J. Krishnamurti, written in very simple school - boy English, and this is well worth pondering over.

327. The reason why:—All such Precepts have served their purpose to some extent in the past; but as we have seen earlier, the world has now reached a stage in its Evolution, where people are not content to obey. They like to know the reason why: nor is this to be deprecated in any sense. If Watt had been content to see the lid of his kettle jump up, whithout shouting "why" at it, we would never have had our steam Engine, and all the wonders that have followed. This tendency to ask questions has changed the whole attitude of mankind to Religion, but that is what has brought all material prosperity, and churned up the whole world. In dealing with this spirit of inquiry, it is always useful to bear in mind one great peculiarity. All these questions generally centre round the questioner, and every such "Why" has another "Why" just in the background. Thus "Why should I believe in God?" usually means-" Why should I believe in God, when I see that in a world, said to be so well-governed by him, I SUFFER SO MUCH? and so on." This very tendency to know "why" is an advance on thoughtless action, and even on blind obedience. A baby is attracted

by fire and without any thought and on the spur of the moment puts its hand in the fire. Later as a child when it wants to cross a road remembering how the mother has often helped it, it takes the mothers hand, and safely gets across. But a day comes when the child becomes a boy and has to go to school and the mother can not escort him every day. He has to learn the Rule of the Road himself. He can cross safely only if he pauses, looks in both directions, judges correctly the spead of the coming vehicals, watches and waits for a suitable moment. He can do this only when he has learnt to think for himself. If we had not all of us reached that stage, you would not be reading this book. All our problems are very much the same.

328. Right Conduct:—What is the Right course of action under a particular set of circumstances in which I find myself? Often two lines of action appear open to us. One thing is pleasant, while the other one appeals to our reason as likely to be more beneficial in the end. Our knowledge of the Laws of Nature is necessarily very limited. For those who are not prepared to accept Authority—and rightly so the only way to find out is to follow what appears best in the light of all we know, and judge by the results. That is why Mr. Krishnamurti in the foreward of his admirable Booklet says:—"To look at food and say that it is good will not

satisfy a starving man: he must put forth his hand and eat it." The food must be eaten; but it is equally important that it must be clean and nourishing; and both would be of no use if there is no desire to eat. If man has no appetite the Doctor has to begin at that end.

Lop-sided development:—This Trinune nature of Creation has been, I am afraid, so imperfectly understood that it is necessary to dwell on it a little more. One of these three may be predominant in its manifestation, but it never exists without the other two. Just as we have, say three subjects in an Examination-Language, History and Mathematics to pass the examination, everyone has to obtain a certain minimum number of marks in each Subject, although he may obtain more in one; but he can not be declared to have passed the examination, if he gets say 80% in two and 10% in the third one. Exactly in the same manner, every one of us has a Physical body, an Emotional nature and a Reasoning faculty. The whole problem is how to get these three to work together: and before he can do this he must get all the three up to some minimum standard of efficiency although he may develop one aspect more than the minimum. present stage in Evolution, when we do not know whether we have reached the passing standard in any, it is always a sensible policy to develop that quality in which we are deficient; and only when we have done this, there will be time enough to specialise later. Instead of this there is a natural tendency to work on the subject which we know to a certain extent, with the result that a very large majority of mankind are lop-sided. That is why we have First class Scholars dying of Thysis, or intellectual monsters devoid of all emotion, or emotional fanatics who never pause to think of the consequences of their actions.

330. Three Types in Nature:—I shall therefore dwell on these Three Types in Nature a little more. We generally have one aspect better developed than the other two, which gives a great variety of temperaments, which I have tried to depict below:—

Туре			
I-2-3	1-II-3	1-2-III	
1. ONE	One in many and many in one	MANY	
2. Mahesha	Vishnu ,	Bramha	
3. Ananda	Sat	Chit	
4. Desire-Will	Love-Wisdom	Knowledge- activity	
5. Truth	Goodness	Beauty	
(Satya)	(Ahimsa)	(Asteya)	
6. S. W.	R. W. M.	J. W.	
7. Tamas	Satva	Rajas •	
8. Inertia	Balance	Movement	

	1-2-3	1-II - 3	1-2-III
	Masculine	Feminine	Undifferentiated
10.	Father	Mother	Child
11.	Old	Both or neither	Young
12.	Lazy	Do the right	Do something
		thing	
13.	Blind Faith	Balanced	Sceptic
14.	Sanatani	Balanced	Navamatavadi
	Sensory nerves	_	Motor nerves
16.	Dnyanendriya	s Mana-Buddhi-	Karmendriyas
		Ahankar	
17.	Strength	Wisdom	Beauty
18.	Vairagya	Viveka	Shat-Sampatti
19.	Dispassion	Discrimination	Character
20.	Kshatriya	Brahmana	Vaishya
21.	King	Ministers	General
22.	Law & Order	Education-	Arts & Crafts
		Science and	
		Religion,	
		Philosophy	
23.	Self-confident	Altruistic	Self-seeking
24.	Adventureous	Sympathetic	Adaptable
25.	Lion-like	Eagle-like	Elephant-like
26.	Surgeon	Physician	Specialist
		(General)	
27.	At best in	Enjoys	Eternal grumbler
	adversity	Prosperity	-
28.	Too proud to	Humble	Proud
	be proud		

I-2-3 2-II-3 1-2-III

29. Lost a watch? Some one must have found it

I will get another Can I get on withand a better one. out it?

and a better one. out it?

30. Tears up Cuts open Keeps, may be envelopes carefully useful some day

It is interesting to note that Activity on the Downward path is started by Bramha, while on the Upward Path Man can reach Mahesha the Great Dnyani quickest by Action—Karma Marga—Doing with Hands one's own Duty. Desire turned upwards gives Will.

31. Karma-Marga Bhakti Marga Dnyana-Marga

32. Doing Feeling Knowing
33. Hand Heart Head

34. Practical Loving Thoughtful

35. Art Religion Science
36. Physical Body Emotions Intellect

37. Duty— What of others? Understanding

Swadharma

As we have already seen none of us have these qualities fully developed.

331. Seven types:—This three-fold classification can be further sub-divided under each Head according to the order in which of one of the re-

maining two tendencies is more prominent:—I-2-3 II-3-1, III-2-1, and their complimentaries I-3-2, II-1-3, III-1-2 and a seventh Type, where an attempt is being made to develop equally along all the three lines, easily the most difficult to attain. Thus we have seven Types or Rays as they are often called, in which each Type when Perfect shall have qualifications in the following order:—

Type or Ray.

• •	•	
I.	The Ruler	Doing Feeling Knowing Hand Heart Head
		A Ruler has to act promptly feeling the unity of life, and know how to adjust later.
II.	Teacher	Feeling Knowing Doing Heart Head Hand A Teacher must feel the Unity of Life all the time, think out and then act.
III.	Thinker	Knowing Feeling Doing Head Heart Hand A Thinker understands first, feels the Unity of Life and then acts in the best possible way.

IV. Poet and Artist All the three equal.

A perfectly balanced worker.

V.	Scientist	Knowing	Doing	Feeling
		Head	Hand	Heart
		A Scientist the Acts according last and le	rdingly a	
VI.	Devotee	Feeling		
		Heart	Hand	Head
		A Devotee fee acts at one out, when	ce and the	
VII.	Server	Doing k	Cnowing	Feeling
		Hand	Head	Heart
		A Ceremoniali	st or Rit	ualist be-
		fore he b	oecomes a	a server,
		acts with	knowled	lge, and
		feels the r	esults.	

It will be noticed that the first Three Types never forget the Unity of Life in Nature, and that is how their work differs from the last three Types. As the latter develops the sense of Oneness, their attitude changes, transposing the two less qualities. Thus a Scientist develops into a Philosopher, A Devotee into a Teacher and a Server into an Ideal Ruler. As all the Six Types have to live in the world so thoroughly unbalanced as it is, and to guide it, it is presumably more advantageous to have Leaders who have developed one Quality more than others. The Fourth Ray Man—Poet Artist.

who has to develop all aspects perfectly equally is the hardest to find, but when he has reached the end, he would be very useful like the Staff at Army Head-quarters, who can be sent anywhere and be able to do any work fairly well.

332. What Ray do I belong to ?:—Of course all this development and Evolution is impossible in one life-time, and so it will have a meaning only if we have been led to accept Immortality of the Self, which again loses all its value if Reincarnation is not a fact in nature, whatever the age of our physical Body, we clothe but an Infant-jiva, and wanting to know our Ray is like that Infant wondering if it will grow into a Doctor or an Engineer in later life. All we need to know for the present, is that we have to grow to a certain extent on all the Rays for the time being. We may and shall specialise in some qualities, but that will be many lives hence. Still as many perhaps feel that they have already reached a stage, when it would be useful to know their Ray, I suggest a pointer, based upon the psychological principle that "bad qualities are easier to imbibe than good ones." All vices are really the result of lop-sided development. So let us analyse our defects and that will perhaps help us to understand our Ray. And if we keep in mind the complementary qualities and try to develop them, it will help us in establishing ourselves in our own goal of Life.

Ray.	Defects	Corrective qualities.
I.	Ambition, Arrogance, Obstinacy,	Tenderness, Humility, Patience.
II.	Coldness, Scorn, Indifference to others	Energy, Compassion, Understanding
III.	Ostentation, Pride, Indolence, Cynicism Aloofness,	Devotion, Exactitude, Sympathy, Adaptibility.
IV.	Impulsiveness, Violent Temper, Jack of all trades	Mental and Moral Equilibrium, Serenity.
V.	Narrow-mindedness, Cocksureness, cti- tical of others	Large-mindeness, Reverence for others. Appreciation
VI.	Jealousy, Sectaria- nism, Selfrighteous- ness, Cruelty	Purity, Tolerance,
VII.	Hypocracy Orthodoxy, Conceit, Bigotry	Amiability, Harmony, Sense of Unity.

We can wear the cap that fits us, and perhaps we shall be sorry that we have only one head for seven caps. We shall find that we have the defects of all the seven rays to some extent, and that proves what I have been trying to emphasise all the time, that the average man today is far short of the passing standard in all the three subjects.

333. The Three Paths.....Three in One:-A mistaken notion that the three Subjects, Bhakti, Dnyana and Karma are independent of each other, and that the Dnyana-Marga, Bhakti-Marga and Karma-Marga are three seperate Paths to Liberation. has not only resulted in unseemly controvereies in trying to elevate one Path above another, but caused great mischief in the world. It is really a One threefold Path-"TRIVIDHA MARGA". Evolution or Liberation as it was described by the Ancients, being the Goal of all Humanity like a Hill-Top to be reached by all the Paths are to be understood to be in the nature of the numerous foot-paths on the hill -side which cross and recross each other every now and then. An old man takes a flatter track which winds round and round, and he has to walk a longer distance to ascend a few feet. A strong man with stout heart will think it all a waste of time, and takes a steep and direct path upwards, jumping over stones and thorns. In doing so he may break his leg and be compelled to discontinue the journey and to rest a while. And when he does start again he may prefer the company of the old man climbing slowly. The apparent short cut may prove much more painful and longer in the end, if Time is taken into consideration. The Ancients called these the "Ant's Path, and the Bird's Path." We can proceed either way till we meet an obstacle and then we have to change; and Evolution is nothing less than a Great Obstacle Race and a Three-legged one as well. Our Emotions like us to go somewhere, while the Intellect pulls another way, and the physical body may refuse to obey both and insist upon a third course, as it is the heaviest of three, ultimately the man will have to yield to it.

334. Take another example:—Not everyone who reads an announcement of a Lecture will go there, only if he has formed a favourable opinion of the speaker. Or strangly enough, if he is led to expect a great deal of irrelevent nonsense, he may make up his mind to attend. That is the first aspect, Desire, corresponding to Bhakti. After the reader decides to go, he will want to know the place where the talk is being given. It may be, that he has got another engagement at the time stated, and he will have to choose. If he considers the lecture more important, he will call for his motor car, and find that it refuses to start. His driver will have to attend to the Fuel-supply, the Lubrication, and the Ignition system of his engine.....which again correspond to the Karma, Bhakti, and Dnyana aspects of the Engine. The car may start, but again the Head lights.....Dnyana...may refuse to work, and then the Driver will have to do something, to put them in working order. And when everything else is ready, the owner just as he steps out may slip and break his leg; and his attending the Lecture would be impossible. He can not act; and that is the Third aspect, Karma. The three can be taken as three distinct functions, and yet they form an inseperable whole. We have seen that Desire and knowledge interact on each other a number of times, before a man can make up his mind to act, he takes one step and other unforeseen difficulties crop up, which call for more Knowledge and greater Desire. We desire, understand and work in alternate spurts. and yet the three are really One. Religion, Science and Morality are indissolubly knit together.

XXXII. Dnyana-Marga The Path of Knowledge.

- 335. The Scope of our Analysis.: To understand the chemical composition of a substance a chemist has to analyse it. He dissolves it. if he He then puts reagent after reagent into the solution, and watches the results. If the addition of a certain acid gives a precipitate, he concludes that members of a particular group are present. He then applies another test and so on. Similarly the Intellect finds it convenient to analyse events. before it can find the relationship between them. In fact that is the Function of Intellect. It is only in this sense that we shall try to study the development, advantages and disadvanteges of each of the three Paths. We shall then know what to expect when we give rein to any out of the three. The Intellect, Emotions or Muscles, the Head, Heart or Hand—the Three Partners in our Firm who rule by turns. We have already traced the manner in which these three Partners joined the Firm; (Chapter XXX) and in Man all the three exist. That is where we have to begin our inquiry.
- 336. The Age of Reason:—This has been called the Age of Reason. Mankind has now reached a stage in Evolution, which can describe best as state of Adolesence, with all its good and bad points. Man's Intellect now dominates all his

actions, although we like to call it Reason. And so we shall take up Dnyana Marga, the path of knowledge first. That "Reason" based solely on sensuous experience can not take us very far has yet to be realised; but even as it is, we have all seen that "there are more things in heaven and earth than are dreamt of in our philosophies." Intellect sharpened to a razor edge can pierce any mystery, if it could work alone unhampered by Emotion; but Mankind has not found this very easy. That is why this Dnyana-Marga the shortest direct Path. which is so tempting to the Intellectuals, is strewn with the greatest number of wrecks, who have fallen into terrible traps which dog every step. With a rubber ball (Emotions) tied to one leg and a heavy lead weight fixed to the other one, the Bird is unable to take to its wings, and so only the very powerful Birds reach the hill-top. All the same the Intellect is by no means to be despised. Without it we shall cease to be men "thinking animals" and all of us have perforce to walk on this Dnyana-Marga. You will derive no benefit from reading this book unless you ask yourself, as you shut it, if any portions out of it appeal to your heart and head. And also if your Reason will demand to know, what are you going to do about it? That is the way.

337. A Modern Scientist and the Scientific Method: The Dnyana-Marga is like a steep Ladder, and the Modern Scientist is certainly typical of a man who has set his feet firmly on the first few rungs of the Ladder: and so let us see how he works:—

I... FIRST OF ALL he collects Facts. He has to remember that all our knowledge is ultimately derived through our five Senses, and we have seen how these are often not very reliable. The Scientist has therefore in getting together his data to be as impersonal as he possibly can. Impersonal measurements means Standards and Units which are fixed, and all measurements have to be done with the aid of accurate instruments. The more exact the measurements, the more highly developed the Science. (Say, physics as compared with Botany.) Even with the most accurate instruments absolutely exact measurement is impossible: and no really Scientific Man will assert that it is proved that the orbits of planets are elliptical. He will "The orbit of an unperturbed planet approaches very nearly to the form of an Ellipse." He knows that all measurements are based upon certain Fundamental Assumptions, so that he takes a plumb line, (except near very large mountains) as the true vertical, and the surface of mercury (which necessarily has the curvature of the Earth) as the true horizontal surface. He knows that all his results are liable to errors

and all he can do is to reduce these to the minimum.

- (i) By avoiding the cause like Refraction. by taking readings near the Zenith.
- (ii) By compensating them, as in a bimettalic pendulum:
- (iii) By allowing for the same error when differences are required:
- (iv) By Doubling it, as in adjusting a level:
- (v) By matching a plus error against a minus error, as in Reciprocal levelling, correct to a thousandth of a foot:
- (vi) By making suitable corrections as for temperature and pressure, by taking the arithmetic, mean if there is only one source of error, or by the Method of Least squares' if from more than one source.

He always suspects results when they agree too closely, and entirely rejects figures which are absurd like a part being greater than the whole, and investigates the reason why. It will be seen that this is a very labourious process, not as easy as it seems.

• II....Secondly, only after a sufficient number of accurate observations are available, does he proce-

ed to classify them attribute by attribute. analyses each observation, compares it with another, and then generalises from common attributes. This is not as simple as it sounds. Burning grass and Rusting of iron look so different, and vet both are the results of Oxidation. He arranges the events in a Time sequence if that is possible. If he finds that one event is always followed by another, and also that the second never occurs without the first one preceeding it, then only can he call the First event the Cause and the Second one the Effect. He thus establishes a relationship between the two; and suggest an Empirical Law. Thus Dalton found that Olefiant gas had 85.7% of Carbon, and 14.3% of Hydrogen—A ratio of 6:1 Mardhgas had 75% of Carbon and 25% of Hydrogen—A Ratio of 3:1 Thus Dalton formulated an Empirical Law—" Law of multiple proportions."

III... Then comes the Third stage. Formulation of an Hypothesis. Dalton suggested an Explanation—"That all Elements consist of very minute particles, which are indivisible and have a definite weight, which he called Atoms." That was Dalton's Atomic Theory or Hypothesis, which is no more than One of the possible alternatives.

A good Hypothesis is one which (i) must allow of deductive reasoning: (ii) must not conflict with other Laws held to be true: and (iii) consequences inferred from it must agree with other observed facts.

IV...Then comes Experimental Verification if that is possible. He observes the same phenomenon under strictly controlled artificial conditions. In making experiments one great rule is to vary only one condition at a time, leaving all the other circumstances unchanged.

Such experimental verification is often not possible as in Astronomy; but even then Astronomers can choose precise times and places for important observations. They take advantage—well-considered advantage of Earth's motions, they can not control.

If the results of this experiment are found to be inconsistent with the original Hypothesis, a New Hypothesis which can account for all observed facts old and new—is considered. Thus Einstein as a logical corollory of his Theory, predicted that the deflection of light in a gravitational field round the Sun should be 1".74, while the Newtonian Theory held to be correct for three hundred years required only half the amount. Measurements taken in the 1917 total Eclipse in two different places gave results very near Einstein, and proved his Theory. Thus led by Modern Science does the World's khowledge grow from more to more.

338. The Scientist's Prayer. I have given the details involved in the Scientific method, to show how the Scientist presumably walking on the

Path of Knowledge is really treading the three-fold Path. He has first of all to cultivate his senses. and a Desire to undertake such tedious work-a strong desire before he can overcome all the difficulties. He has then to sharpen his Intellect, the Analytical Faculty: and then in making his experiments he has to follow the Path of Action as well. A Scientist is no respector of persons, and so he has to learn to keep his Emotions under control, so that his likes and dislikes may not influence his judgment. His Dominant motive is the Search for Truth: and he has to cultivate enormous Patience. To him there is nothing too small or too great, nothing trivial. To mention only two names amongst a number of Pioneers: Herschel gazed at the heavens night after night noting down countless measurements of the positions of innumerable Stars, and comparing them again and again, before he could find the New Planet named after him. Later Charles Darwin observed Plant and Animal life, with their minutest details, varied conditions, perhaps repeating the same observation many times over, so that no blunder should be made in tracing the thread of Causation. He plodded on twenty years before he placed; before people his " Origin of Species," which revolutionalised the thought of the whole world.

339. The Resthouse to his Prayer. A Modern Scientist has thus to develop great patience

and perseverence, a meticulus regard for accuracy, and above all an impersonal attitude. He has to learn and to follow the Scientific method and the Rules of Logic, both Deductive and Inductive, and has to be constantly on the look-out for experimental verification. It is only such an indefatigable devotee worshipping at the Shrine of Truth, who gets a response from the Goddess—for all their discoveries are really no more than this.

"They certainly are not the results of strict logical deduction from facts observed. Apples had been falling before the eves of Newton himself for years till one day, instead of Newton arguing out the Law, Gravitation Itself, as it were, dropped a visiting card on him," as an Eminent Occultist point out. "When Sir Humphrey Davy suddenly discovered Sodium by decomposing moistened potash and soda by the help of several voltic batteries, he is said to have given vent to the most extravagant delight, jumping and hopping about his room on one leg and making, faces at all who entered. physical Law of Archimedes was not accumulated little by little—it sprang into existence suddedly so suddenly indeed, that the Philosopher, who was enjoying his bath at the time himself sprang out of it, and rushed about the streets of Syracuse like a madman, shouting Eureka, Eureka," Such Inspiration can come only to patient, indefatigable devotees of Truth.

340. Responsibility for misuse of Knowledge:—We have seen what one of best Scientist is like, but not all who frequent laboratories come up to that standard. Every student is constantly taught to work without fear or favour, and does derive benefit to the extent to which he learns the lesson. Every attempt to follow impersonal standards purifies his mind, and a study of Pure Mathematics greatly helps in that process. His Physical experiments show him how far he has succeeded in this. Most of them are however interested in knowledge which they can use for personal ends. Many students "commit research" only to qualify for higher salaries, and even if some of them do not care for money, the desire to be the first in the field to proclaim the discovery, the longing for name and fame are not infrequently present. So many frankly value the knowledge only for its practical application. If there was a Newton, in his time there was a Hooke as well. Like him, many are less anxious to get at the Truth, than to frame plausable theories which will enable them to unlock some new Force, which they can harness. There is nothing wrong in "Exploiting Discoveries," as the phrase goes; but once applied, they can be used not only for the good of mankind, but for destructive purposes as well. Alfred Nobel gave the world its Dynamite, and made possible tunnels under the Alps. Little did he imagine how his discovery would be used in later years for killing millions of

men and destroying billions worth of property. According to prevailing notions, we do not hold Nobel responsible for this mis-use; and yet, we are told that in the case of the giant mirror which has been cast with such extraordinary care for the New Telescope, even a ray of direct sun light will set up strains inside the glass, and distort the image. We have put faith in Newton for three centuries, and are we now to accept that by awarding "Nobel Peace Prizes," we can wipe out the responsibility of the one man, who made such ghastliness possible. Of course Noble must be credited with every ounce of good he has done the world in peace times and we all know how Nobel must have risked his very life in his experiments, in his Search for Truth, All these will stand to his Credit; and he certainly has planted his feet firmly on the First Rung of the Ladder of Knowledge. As compared with us, having done a million times more good and equal amount of harm, he has earned his right to quicker" progress on this Dnyana-Marga. When the immortal Nobel within, realises that Life is one, he he will reach his goal very speedily. Many Philosophers in the West are now conscious of this aspect of Truth that our knowledge has far out-grown our Moralsagain an example of lop-sided development, the dangers of which I have been persistiently pointing out.

341 The Scientific Philosopher: — The Western Scientists perfer to confine attention to the Physical world, and to phenomena which can be recognised by the five senses. Science is prepared to recognise the forces which act in a Medium like Aether properties of which they can but guess and infer, as long as the results are tangible. We have already seen how the very Theories they accept are not the logical sequence of their "Tuition." but of "Intuition," which is no more than a Sixth Sense. But they will not accept the obvious. A blind man can not see, and a Deaf-dumb can not hear: will they be justified in denying the possibility of Painting or Music? That is exactly what the Agnostice are doing when they neither accept nor deny. The Analytical mind which can work only on information gathered through the senses determines the Limits of their Knowledge, and they assert that Man can know no more i!! Curiously enough the Upanishads also agree that the Inner Reality is beyond the Mind: only they do not stop there. They want Man to go beyond and point out the way.

The difficulties, and the reactions of a typical Modern Thinker, who met one of the members of the 'order of the cross' have been very ably summed up by Mr. C. E. M. Joad in his Book* on page 77 thus:—"I expressed gratification at the

^{• &}quot;The Testament of Joad" by C. E. M. Joad (Faber and Faber and Faber). London 1936.

conclusion but could not help confessing that I would have greater confidence in it, if C would be so good as to enlighten me as to the nature of evidence, on which it was based. What justification indeed was there for this whole way of talking and thinking?

C replied that he has access to sources of know-ledge which were denied to great majority of men and women. I must not however misinterpret him and jump to the conclusion that these sources of knowledge were denied to ordinary men, because they were ordinary; any one who was prepared to subject himself to the necessary disciplines and to master the necessary technique could have access to them. Moreover his feet would be set upon a way of life which was infinitely superior to that which most men were now living. Wasn't it then, he asked me, worth while making the effort to obtain this knowledge, and to master the superior technique of life?

"What, I wanted to know, did making the effort involve? It involved, I found to begin with the abandonment of smoking, of drinking and of meatesting. I jibbed at the outset. For my part I said it was not worth while: life was too short. How indeed could it be worth while for me to make these very real sacrifices, unless I shared C's faith and since I could not share his faith unless I had his knowledge and since I could not have this knowledge unless I

had access to his source, and since I could not have access to this source, unless I had mastered his technique, and since I could not master his technique, unless I first made the necessary sacrifices, it seemed, I said, I was enclosed within a vicious circle."

Mr. Joad by playing Chess with C had sufficient proof of C's mental development, and yet that was not a sufficient inducement. His Desire was not strong enough, and that is why I have devoted the whole of the First Part of this Book to Desire—Bhakti—aspect of the question.

We have seen that Sir Oliver Lodge was the only Scientist of repute who dared dabble in things beyond Death, and we have his word that "The Dead do not die," given with the same assurance, with which he gave his other physical discoveries to the world. His position is certainly an advance over that of the Agnostic; but in going ahead I wonder if Sir Oliver realised that he has reached the position of the Dead Centre. When Science gets reconciled to Subjective Methods as we have seen in Chapter VI, then only will they go forward by reversing the motion by turning inwards, instead of going outwards.

342. The Literary Critic:—We have already seen how the Subjective methods of Pythagoras as a means of getting super-sensuous knowledge were rejected by the West long ago, but the East

has not yet forgotten them. One great advantage, of these is that they do not demand any expensive. apparatus. A clean healthy body, an open mind: and an eager intellect constitutes the aspirants laboratory, and all the equipment required consists of a few books and some writing material. The first few steps are also followed both in the West as well as in the East as Devotional exercises, and by Literary people. It is interesting to see how an average student of literature proceeds. He deals chiefly in "Words" and has necessarily to confine his attention to one language at a time. He studies. each word in that language, its derivation, its history and its meaning in daily life. He then tries to understand the way in which different words are strung together—the Grammar of the language. defining the use of various words, as nouns, verbs, adjectives etc. His chief object is to get at the thought of the writer as correctly as is possible. He often finds that the same word has been used differently at times, and he makes a note of these variations. Before the advent of the Printing Press Books were few and far between; and yet by the time he has mastered one Manuscript, a second i one is discovered, till there are thirty or forty "Reliable Versions" of the same Book. These have a great deal in common but differ in many details. He wonders, which one represented the thought of the Original writer? In the case of old books it is not improbable that many others have interpolated. or subtracted portions to suit their purpose, while so many may be just copying-mistakes. Which of these are correct? What did the Original Author mean—? By the time one student has come to a certain conclusion, another student equally clever wonders if there was any man at all answering to the name of the supposed author!! Who can say? Everyone naturally claims that his recension is more reliable than some one elses; and all this leads to nothing but dissentions and the correctness or otherwise can be judged only by Authority of one Man or another.

343. The learned Pandit.—Then there are other people who want to go behind the words to the Real meaning. Thus we have people in India who have been discussing whether the Bhagavadgita teaches Karma, Dnyana, or Bhakti, Action, Knowledge or Devotion for the last few centuries and have not yet reached any satisfactory conclusion. One can point out that the word "Bhakti" and its derivatives occur 19 times whereas "Dnyana" comes in 89 places, and "Karma" is mentioned in 114 verses, and conclude that the Gita was written to teach action. If any further evidence is necessary "Fighting" is talked of in 13 places: Can there be any doubt about the intention of the Author? Another scholar can show that the word "Shanti," Peace is also mentioned in 13 slokas, and so if the Gita enjoined Action, the object is Peace

and not War. A third man can claim that the whole argument of the Gita centers round one question—Is man the perishable Body or the Immortal Iiva within? And as this is a matter of knowledge -Pure experience-Dnyana is the object and nothing else. One who can not accept immortality can see in the Vision of the Heavenly Man, nothing but an attempt at terrorising Arjuna, and can not possibly be fact being against our every-day experience, and so on. While all seem to forget the concluding verse: -- "Thus hath wisdom more secret than secrecy itself been declared unto thee by Me: having reflected on it fully, then act thou as thou listeth." (XVIII-63). And yet, very learned men have considered it worth while arguing the point for Centuries with a great deal of success. They have equally well-read adherents; and now different Schools of Thought, each one interpreting the same Bhagavadgita in its own way. Each School has the force of Logic behind it, and of course a number of Athorities, from which they deduce the Truth.

344. Logic and Controversy:—All these intelligent men have to be well-versed in Logic, and even in the Art of Controversy. If Cambridge had its Wranglers, so had the Indian Universities. Whenever any one considered himself ready to enter into a disputation with others, he usually appeared at the Court of a King, who was

always surrounded by many learned men. The new-comer then challenged others to disprove some statement he made, and had a wordy battle with some Pandit, and if he was adjudged successful, he was then rewarded by the King. Like any successful competitor in a Tournament he was naturally pleased with himself. He often got a place at the Court. Such learning was and is very useful in life where success in a career depends more on being plausable and not necessarily true. That is why we have very successful Advocates arguing for the Plaintiff as well as the Defendant, two exactly opposite points of view with equal convention. The Advocate has necessarily to turn a blind eve to arguments in favour of his opponent, and he soon gets into this habit, without being aware of it. "Learned Friends," as they call each other, argue a brief from a text-a human text; and when they take some Statement of an Eternal Verity like-"Aham Brahmasmi, Brahma Satyam, Jaganmithya, Jivo brahmaeva naparah," they think they have understood it all if they can quote a sufficient number of other texts in support. These texts crystallise into Slogans, and soon a Jargon. All these men are also treading the Path of Knowledge, but it is not easy for them to disentangle the personal element from their thinking process. The wish to belief is a very subtle factor, and the slightest trace of it vitiates all Subjective approach to Eternal Verities. A Scientist who accepts no Authority has his feet

more firmly set on the Path of Knowledge, than such "Learned Friends". On the other hand merely by professing to believe in no Scriptures, accepting no Authority and even by discontinuing many things they did before, their Path does not become, easier, without the Scientist's rigorous training, we have seen before. In fact all the Literary Critics, Scholars, Pandits and Learned Advocates are dealing in a subtler and yet Objective world, with only Human Standards with which to verify their conclusions. That is why the Subjective Reality still eludes their grasp.

345. The Vedantin's Path of Knowledge:— The Vedantin's Path of Knowledge commonly talked of in India is attributed to the Adya Shankaracharya, the Founder of the Four Great seats of Learning. Tradition has it that he lived from 788 to 828 A. D., although there are records at the Dwaraka Matha which state that he lived very much earlier from 476 to 443 B. C. Whatever that be, all the Teachings current in India are given in His name. He was born of poor parents. He is said to have started learning the Vedas at the age of seven, mastered most of what was known in two or three years, and become a Sanyasi, and after accomplishing a very great deal, he passed away at the age of forty.

Presumably he was an exceptional Man. Perhaps in the course of History we have a score of

such men born with practically no desire for things which the average man yearns for. He seemed to know instinctively, what very few realise at the end of many lives that:—

- 1. As the Gita puts it, all pleasures are contact born.
- 2. As the Buddha taught, "Birth is sorrow-ful, growth is sorrowful, illness is sorrowful, and death is sorrowful. Sad is it to be joined to that which we do not like, sadder still is the separation from what we love, and painful is the craving for that which can not be obtained.
- 3. The cause of all this sorrow is Thirst for sentient existence, and only he who conquers this Thirst can hope to attain lasting happiness.

Such a one was Shankaracharya. That is why only a man, who has reached a stage in his Evolution, where he knows that (1) every flower has a serpent coiled round it, (2) that an average man's life is at best a poor thing as compared to what it might be, (3) that wealth and power can only last one life-time, and, that (4) even the joys of heaven are but fleeting, only such a man can really benefit from his teachings, which are intended to create in him an intense desire for Liberation. Even such a man has to keep alive, but he will naturally reduce

the struggle of life to the minimum, often by retiring to a forest and remain contented with what sustenance his surroundings bring him, as far as his physical body is concerned. He must then turn all his mental energies inwards, and watch his mental reaction to every impact from without, and practise all the qualities required to maintain the necessary equilibrium. Ability to follow this life is the minimum necessary qualification.

346. Negative thinking:—Only for Such a worthy aspirant, Shankaracharya in his works gives numerous directions which have been amplified by various commentators. The student must never forget (1) that there is only One Eternal Truth, and that Truth is he: (2) that objective creation is a Delusion, created by ourselves. This delusion is caused by many factors.

The Five Bhutas and Five Kingdoms of Nature, ten composing the Physical Body: The Five Lifebreaths, and the Five Karmendriyas make up the, Body of Vitality:— The Five Dnyanendriyas, Mana and Buddhi make up the mental Body:—At the top are five Kleshas (afflictions) including the time in making faculty, which is no more than a reflection of the Reality within. This five-fold division, is the skeleton on which is hung the whole phenomenal world, and the student, while examining every impact from without is asked to analyse it.

and put it in the appropriate pigeon-hole, the Five fold classification Panchikaran, without forgetting even for a moment the Inner reality is beyond all these thirty-two elements. It is really a constant Denial, as it were a process of Negative thinking, in which an attempt is made to anlyse every phenomenon into its simplest elements and hence to the root cause. And in every case this Root cause can be traced to the Five Kleshas and ultimataly to Avidya—the Great heresay of Separateness.

347. Panchikarana, the procedure, as I understand it is something like this. "Suppose an Aspirant gets his ration from a shop and finds that the rice has a great deal of sand mixed up. An average man will start grumbling, and perhaps do nothing more except having a grievance, to brood ever. The aspirant will analyse it into factors. The sand are particles of matter but they can not be digested. Both rice and sand are made up of the Prithvi Tatwa. One is vegetable and the other mineral. The former contains more water than the latter. Why has the dealer mixed the sand? Obviously to make more money. But he does not seem to know that wealth is useful at best for one life, whereas dishonesty taints the Jiva which lasts' comparatively longer. Poor man! He does not know that ultimately all are part of One Great Eternal Truth." The aspirant will go through similar reasoning every time something happens to upset the balance of his mind. How difficult and practically impossible this will be for a man of the world can be easily seen, and that is why I have pointed out that only a man who has reduced his appetites to the minimum required to keep alive might hope to make some progress. None else need apply.

348. The End achieved:—The process of "Negative thinking" is not a mere parrot cry, but strenuous exercise, and must ultimately lead to a positive assertion of the Ultimate Reality within, enveloped by a Veil of Matter. The Aspirant's analysis tells him how this matter is either in at comparative rest, moving somehow, or moving rhythmically. It is impelled to do so by a Ishvara -"a Heavenly Man not touched by the vehicles of Affliction, Action and Fruition," as Patanjali puts it. Where others see diverse Ornaments, the Aspirant sees only the Gold of which they are made: where others see waves, he sees only the Water. What to others appears like a snake, he sees nothing more than a piece of rope: In a myrid shining dew-drops he sees only the reflection of the One Sun above. The aspirant finds himself in a circle of which the Centre is everywhere but circumference nowhere, a Drop of water into which he sees the Ocean emptying itself. All these phrases can only point to the Reality within, but no words can describe it. He sees God everywhere and everything as part of God. He transcends the heresay of Separate existence.

A stage still further he feels himself like a person sitting on a tree on the bank of a turbulent stream who has all along imagined that he was being washed down by the current, suddenly realising that he is perfectly safe on the firm bank and has never really moved. He reaches the stage where as the Upanishads put it "The whole is that: whole is this; from whole whole cometh; take whole from whole, yet whole remains." That is the Vedanta Method of approaching the Eternal Truth as I understand it. The aspirant is convinced that all Earthly joys are not worth the trouble, he naturally soars to the ALL Highest. That is the Path of Knowledge of the East as it is intended to be. We are assured that some individuals have trodden that Path in the past, are treading it today and will tread it in future, but most of them are "born to blush unseen and we do not know them, except in the case of Shankaracharya and like."

349. What it might be and what is:—We have seen, that it is by following this Path of Knowledge that the Western Scientist has succeeded to a great extent in securing physical comforts for mankind, but he has at the same time created more problems than he has solved. Those who pursue Pure Science, with their impersonal attitude and

rigorous discipline have planted their feet firmly on this Path, but can make no further progress until they turn inwards. They can not follow the Subjective method because they do not consider it worth the sacrifices involved. While everyone is busy making money, the Learned professions, the Advocates, the Literary Critic, the Scholars and Pandits with their heavy load of learning are still steeped in human values. While Others amass gold and silver, they deal out words, words, and words. They say "Aham Brahmasmi": while their Aham weighs a hundred and fifty pounds, instead of the Solar System, Suppose something happens to make them angry. They argue "The particles of anger are moving violently. Let them do so. What does it matter to me? I am Brahman." They even quote Scriptures. Does not the Lord say in the Gita, "Oualities are moving amidst qualities"? They let them do so, without the slightest attempt to curb their anger. Are not Jeevanmuktas said to be able to do anything, without being affected by the result? I have known a very clever person, after a dose of Vedanta taking to eating meat, because Brahma was in the meat as well. When one of them was seen running away from an approaching elephant, he explained that the Elephant was unreal and so was the running away. And they do not even see how they are defaming Shankaracharya by attributing this explanation to Him. of all people !!!

The Real, difficulty is that we are not yet aware of the fact that "Wealth and Power are at best for one Life." This means a Conviction that "ALL LIFE IS IMMORTAL AND ONE......the quintesance of all Knowledge. That is why this Dnyana Marga the shortest Path really proves the longest in the End. ONLY LOVING ACTION CAN LEAD TO KNOWLEDGE AND WISDOM.

XXXIII Bhakti Marga—The Path of Devotion.

350. Devotion is an Emotion. Although we have to develop all the parts of Being-Head. Heart and Hand, some people find it more convenient to begin with the Heart, the seat of their Emotions, not in the physical but in the subtle body. When a boy has passed the Fourth standard and has been promoted to the Fifth, we say that he is in the Fith standard, and in the sense and in that sense only that ours is the Age of Reason. have seen that Reason restricted to Sensuous experience can not take us very far. Our Age of Reason has just begun; and we shall certainly be worthy of that epithet in time. But for the time being are not the majority of men, guided more by their Emotions than by their Reason? That is why so many of us find it easier to begin with our Emotions which we have cultivated to some extent. natural. We have likened our emotions to horses and the horses by themselves can not obviously be trusted to take us where we want to go. Coachman alone can guide them, and so he has first of all to understand the psychology of the horses the "Science of Emotions," Just as in trying to tread the Path of Knowledge our great obstacle was the want of a strong Desire (the emotion aspect) in taking our emotions in hand we have to start with' the knowledge aspect, as the foolish mother often.

does greater harm to her child out of sheer ignorant love. All our troubles on this Path, I am afraid, due to our losing sight of this fact. And of course this knowledge has to be put into practice. So the third aspect Karma has to be constantly kept in mind.

351. The First step.—Any person who wishes to tread this Path can not therefore do better than going through the "Science of Emotion" by Dr. Bhagvan Das or at least through the short summary in Chapter XXV. It all begins with the outside impact on our consciousness. Some give pleasure. other pain. The memory of these sensations give rise to likes and dislikes, about various things; and these then crystalise themslyes into emotions towards the persons who bring us these impacts. We love one who gives us pleasure and hate another who causes pain. As all Life is One: we are only hating some diseased part of our own being. Do we not say "we hate examintiaons?" Hating the examiner is the next step, when you fail. All impacts from out-side, both pleasant, or unpleasant are intended to bring out the best in us. That is the process of evolution. To a Devotee a "hateful person" is no worse than a bitter medicine, or a red light in the street. His aim in life is to cultivate his "Love emotion" under all conditions, so that it dominates everything wise. He can then see "The One in the Many and Many in the One," the Goal, we set out before us.

352. The ladder of Love.—Let us refer to paragraph 270, and if we remember another law of life, "We receive only as we give," we shall see that the cultivation of our emotions must begin at the lower end. If we cultivate "kindness, tenderness and compassion" towards our inferiors, we shall "smile at them, caress them, or burst into tears in sympathy" we shall find it much easier to be "polite, friendly and loving" towards our equals. Then only we shall be worthy to feel "respect, reverence or worship" towards our Superiors. We begin generally at the other end by worshipping the ALL HIGHEST, while we feel "self-important, scornful, or even disdainful to our inferiors (which is the path of hatred); and then wonder why God does not respond to our worship!!! I have called this the "Ladder of Love" only to bring out the great necessity of showing our love towards our inferiors. Without that all attempts to reach the All-Highest are futile. Living in a mixed world as we do, we always get opportunities of practising all the virtues on the ladder. An average mother who has to deal with helpless babies, necessarily developes tenderness, and that is why she is already entering the Path of Devotion at the correct end, and is thus better fitted to approach the Divine. Infant-school teachers and other teachers to a lessor extent, have to begin the same way and that is why such people can make great progress on this Path. A Doctor who has to deal with helpless individuals in a state

of pain, and if he begins by sympathising with them he can purify his emotions very easily. A Surgeon may have even to cut off a diseased limb to preserve life: but if he does it with the utmost consideration and tenderness, he too can get on much faster than many others, who follow mechanical professions. But the essence is, "Give and thou shalt be given." The Divine will descend on them faster that they can ascend to receive it.

353. We begin at the wrong end. —Man somehow seems to find it very easy to get hold of every stick at the wrong end. So the Devotee starts not even with Brahman but with Parabrahman-"TAT" and as that is impossible to conceive of, we call it GOD. We conveniently ignore the Immanance of God and instead of trying to understand how God made man in His image, Man proceeds to make a god in his own image, with all his own qualities, good and even bad ones. Man's god is pleased with a good meal, gets angry if you do not partake of food offered to him (his prasad) and even ruins the man who forgets this duty. Man makes stone and metal images of God and His Officials the Devas, or His Avataras, and dresses them in the best clothes, similar to those he wears, and pours out on them or rather through them all the Devotion he is capable of. To the Christian the Cross serves the same purpose, and the Muslims turn their face to the KABBA which to them is the holiest spot on

earth. All of them are doing the same thing that is focussing to one point all their Love in the ABSTRACT. Man finds this much easier than facing the CONCRETE world. A brass image is simpler to feed than the poor hungry beggar in the street, and much more difficult than the foolish brother who demands this and that. In as much as all this worship and prayer is turning the mind inward. it is a very, very useful exercise for the time being. But what we need is a prayerful attitude in facing the world in our daily life. There is the well-known case of Dr. Barnardo who often did not know where the next meal for the orphans in his homes was coming from, and he prayed and got it. In quoting his instance let us not forget that Dr. Barnardo began at the right end, with his "Homes for orphans" and then appealed to the Divinity that resides in the hearts of men and women round him. He was not merely bowing down to the Cross, but had taken up his Cross, and was following the Christ, as He made men do. Turning inwards even for a short while, is all to the good, and enables us to draw on the Power within us, which we often misue later in the day. It would therefore suggest that we should give working of p but I do plead for a better understandi what we are doing, so that we may be more efficient.

354. Complete self-surrender essential;— To a Devotee the whole creation is but an expression of God's will and nothing can happen therein, not a leaf can fall down from the tree, without His orders. He is Omnipresent, Omniscient, and Omnipotent, or Immanant in His Creation as some believe. In Him we all live and move and have our Being. The best course for the Devotee is therefore to surrender himself completely, fully trusting in God's Justice, without fear or favour. Without fear, because the gold within him can never be touched by fire which can burn only the dross. Even if his lot painful, the pain can not have reached him, unless he had done something to deserve it; and by suffering it willingly, he can transmute it into power to do greater good to people. He prays for no favour, because he knows that if worldly happiness comes to him unbidden, he need not reject it; but as a compensation he gives up voluntarily something of his own ease and comfort, to take upon himself something of the pain of others. He must not of course envy other people who are better placed in life: and not even feel iealous if on some of his own companions seem to make better progress. In fact he must give up all ideas of personal agrandisement, and be perfectly content to be what he is: but at the same time he must work hard to increase his usefulness to others. Alert to take every opportunity, constantly watchful, asking for nothing, expecting nothing, but ready

to fill any nitch in God's household. "Someone has put it very well," "Only when the Devotee dies out, Devotion begins." When the Bhakta vanishes, Bhakti begins. That is the Path of Devotion.

355. Narada Bhakti Sutras: - Perhaps the best exposition of what real Devotion is the one in "Narada Bhakti Sutras". which deserve a very careful perusal by every one aspiring to follow this path. Narada defines Bhakti as "the intense longing for the Inner Reality within the Universe." devotee must obviously be convinced of the fleeting and evacent nature of all worldly pleasures; and that "Wealth and Power are at best for one life." He will therefore cease to take any interest in these; and none of the ordinary pursuits of men will enthuse him any more. Outwardly, he will behave like other people, but he will be perfectly contented with what comes to him, as long as it will suffice for his food, clothing, shelter-Just bare needs for his subsistence. In short, he will be in the world; but not of it. He will concentrate all his energies on everything that leads him towards the Inner Reality within. He will not lend a ear to stories of worldly men and women, or rich people, or such as excite his lower passions. He will not assoicate with people who are steeped in worldly pursuits. He will leave off all disputations which lead nowhere, and keep a constant watch over every thought, word and deed of his own and practise self-control at every step. He will keep company of only those who are like-minded for the time being. It must be admitted that these are hard conditions for a man who is living in modern society, and that is why so many who think that they are on this Path of Devotion, fail to reach their goal.

356. Nine ways lead to Bhakti.:— The Bhagavatam lays down nine ways in which the as pirant can reach his goal and these have been interpreted by various ways in diverse ways.

The first one is "Hearing", a word which obviously comes from days when there was no printing press and books were few and far between. A great deal of knowledge was put in the form of short pithy sentences—The Sutras— Threads—and these were often expounded by learned men or Saints who had followed the Path to other aspirants. That was the way in which knowledge could be transmitted in those days. Now with Books easy to obtain, we may substitute "Reading" for "Hearing," although we lose the personal experience of the Lecturer. In reading alone we are likely to miss the real meaning unless we have already mastered the Art of Reading properly, as we have seen in Chapter XXVI. Read for a short while and then brood over it as we slowly suck an orange. That is the First step.

The Second step is "Kirtana"—singing the praise of God as it is commonly understood. We have seen how even a difficult problem can be made easy with appropriate similes and our wise men of old have woven round the great Laws of Nature many stories, which describe in popular language how great men or even God Himself in His Avatars behaved in a certain set of circumstances. So it is not merely the Name of God but the qualities of Head and Heart that He exhibited which are more important. It is also our common experience that we understand a subject best when we try to explain it to some one else who, knows less. As soon as we know something we share it with others and that is the most essential art. We get only as we give. That is the Law of Spiritual Life.

The third step is "Remembering" which is intended to remind us of the constant necessity of reminding ourselves of our Real Goal. which is "To see the One in Many and Many in One". That our mind is apt to wander from the focal point and we must bring it back as often as it does so, to the Ideal within us—Personal or Impersonal.

These first three steps go together; and really describe the manner of mental development, applicable not only to Bhakti but to every subject. That is why learning is not a necessary qulification for entry to this Path, because if any one correctly

understands these first three Rules and follows them he will have learned, how to study itself. They together form the knowledge—part of Devotion.

357. The Right attitude:—Next comes "Padasevana"—literally, paying respects to the Teacher by touching his feet. Presumably this had its origion in the mythological story of Mahadeva the Great Lord receiving (See Gangavatarana painting by Ravivarma) the Heavenly Stream Ganges which give immortality, which descended from the feet of the Almighty on to the Head of Mahadeva. Hence the practice at least in the East, of taking as a mark of respect the dust from the feet of the elders, and the Teacher. Even in the West "learning at the feet" of some one is a common phrase. As a lesson in humility it is a perfectly good discipline, as far as elders who being born earlier have helped us in our child-hood are meant. But when we prescribe it for a teacher there arises a difficulty. A good master-tailor or carpenter are certainly worthy of respect as far as their Art is concerned; and I may also go to them to learn what they can teach us. But Iwould not "quite touch" their feet. We have a teacher who teaches us grammar in our boy-hood or later say History or later still Economics or Philosophy, and if we take the injunction literally we shall have to draw the line somewhere. Presumably the Spiritua Teacher who is meant. Samartha Ramadas devotes a good deal of space in his Dasabodha to this subject. of what is a good student as well as a good teacher and he warns us against a number of shops who deal in this soft-ware labelled Spirituality "like others who sell hardware. " The Bhagvadgita lays down how such a "Sthitapradnya—Stable-minded would talk, sit down or walk" (II-54-59). Such Persons who have reached the Goal of Human Evolution stay behind on the Earth only to help us—their struggling younger brethren; and we are told that They are far more anxious to find promising disciples than are we to find them. Before their spiritual vision lies the whole earth, teeming with millions most of them undeveloped, and therefore inconspicuous; but wherever amidst that multitude there was one who was approaching even at a great distance the point at which definite use could be made of him, he stands out among the rest as a lighted lamp in the darkness of night. For any one who has woven into his life—again not the capacity to expound them—the essence of Bhakti that Narada has described for us, it would be utterly impossible not to catch their eye. The difficulty is with us, not with them. Has not Lord Vyasa told us of yore that "even when he has been standing before men with both arms raised, no one hears me." It would be perfectly reasonable to say than no ship can safely enter a harbour sorrounded by rocks, without a Beacon light, which beckons to them the correct road. These Jeevanmuktas thus patiently stand before

Mankind all the time. It is ridiculous to imagine that they have either the time or the inclination to get us to shampoo their feet. What is obviously meant is that we must have the right attitude of the Humble and Receptive. Raja Ravi Varma has painted for us very beatifully how Lord Mahadeva stood perfectly braced up and all attention to receive the Blessing from the Almighty. That is Padasevana.

358. Gradual purification of Emotions:— To come in contact with a highly Spiritual perhaps its own advantages, but at our stage of evolution it amounts to an ignorant man choosing a Professor of subject, he knows nothing about. Devotion to an Ideal is far safer. Real Spirituality begins when a man learns to take greater interest in the joys and sorrows of other people than his own, and suppose we take this as our Ideal for the time being. Whoever shows forth this quality in his daily conduct will then be our Guru for the time being; and when we begin to watch for it, that that quality is not as rare as we imagine. If the Bhagavatam gives us nine ways of Bhakti, and a personal Guru, it also tells that once a man seriously starts looking inwards, he can with the help of his personal experience and Right Reasoning become an excellent Guru unto himself. (XI-4, 19-20); and it gave in detail how AVADHUTA reached the very stage by following this method, when he mentions twenty

four of his form each of whom he learnt one special lesson. His twenty-four teachers may not suit our way of looking at life; and we shall choose our own. But if we look upon the whole as a School, we have neither enemies or friends, but all alike are our teachers we shall learn Patience and Perseverance from a common spider as did Robert Bruce. If we remember the common saying. Each man is "the cock of his own walk," we shall easily accept that the meanest of us something in him which he can teach us, if we have the eyes to see it. If we have understood the necessity of an humble and receptive attitude (Padasevana) we are then able to enter into the spirit of Vandana (bowing). Sakhva (Friendship) to the God within every one, and such man who is a Servant of Humanity will, in as much he will have served unto the least of mankind, he will have served Christ, as He told His followers. There is no harm in making use of brass images, like dumbells, to practise these three qualities; but no one can come face to face with God, until he has learnt to see Him in the face of his fellow-man. Namdeva could meet God only when he could see Him in the dog which ran away with his bread. The three "Bowing, Friend-ship, and Service" are well graduated exercises intended to help us in the development of our Love Emotion, which I have already pointed out is the Real objective on this Path of Bhakti.

359. Action or Contemplation:—A man who is humble, receptive, respectful, friendly and lives only to serve, who takes from the world no more than bare subsistence, may live in the world, but will not be, of it. It is possible that he may prefer to lead a contemplative life. That is by no means an inactive life, if we keep in mind, what we have seen before, that "Thoughts are things" what is more. Gods, agents on earth, the Devas, Angels officials work mostly in that world and a man who knows how to work in cooperation with them. As the Gita puts it, "With this ye nourish the Shining ones, and may the Shining Ones nourish you; thus nourishing one another, ye shall reap the supremest good". (III-11). "That is Archana-Worship-which means "To cause the Light to The Hindu has his Sandhya vandanaworship at Sunrise and Sunset, the Muslim has his Namaz, the Christian his Eucharist and so on. All these are scientifically arranged exercises, which release forces which help mankind. For instances, we know how the Gayatri-Mantra of the Hindus has come down to us from time immorial. Invocation to the Solar Diety—who stands behind the physical Sun. One who has developed the inner sight has told us that "on the recitation of the Gayatri a great shaft of light immediately pours down upon and enters the reciter. That comes as though from the physical Sun. This shaft is white slightly tinged with gold: but when it has filled the very soul of the reciter, he promptly shoots it from himself again in the seven colours of the spectrum. The result is marvellous and spreads peace and blessings over very wide areas". The same investigator tells us how wonderful the effect of the Christian Rituals is over the countryside.

All these are intended to lead a man who prefers a contemplative life to go within, and the means employed must obviously be such as to conduce to a peaceful atmosphere, and all, harsh noise, Puja with loud-speakers often seen in religious places is entirely out of place in such "Archana." Soft chants or harmonious Music will help to quieten the mind, and is to be recommended. Even a very noisy town is quiet very early in the morning, and such time is best suited to such worship. The voice of a poor mother singing a soft tune at such time, soft—lest she should awaken her sleeping children, will reach Heaven where the Templedrums will fail, to perentate. That is the essence of True Worship.

360. The Final Goal:—The Path of Devotion is thus the way of reaching the Goal by the development of Love, and so the first steps are curiously on the Path of Knowledge. The Bhakta must begin with Science of Emotions, and, then comes utter self-surrender to God. Bhakti begins

only when the Bhakta vanishes. Complete submission to the Will of God is his Law, but he must first have understood what that Will for Mankind is, lest it may lead to fanaticism and bigotry. Understanding it rightly, he has then to practise the gradual purification of his Emotions in his Daily life—Active or contemplative. The Action aspect as we shall see. It is only after attending to all the aspects-Dnyana, Bhakti and Karma that the Devotee ultimately reaches his Goal—. He begins to see every moment of his life, the One in the Many and Many in one—Self-realisation, Liberation, Perfection whatever we prefer to call it. What next? There is a Greater Perfection awaiting Him, as we are told. It is by no means an extinction as some suppose. "It is an endless Ladder of Evolution, of which no one knows the limit. Perhaps the Creator knows or does not know," as the Upanishads put it.

XXXIV Karma-Marga, the Path of Action

Slow but sure. Last but not the least comes Karma-marga the Path of Action, where we perfer to begin with the physical body the most material and heaviest of all. We have likened the Path of Knowledge to the flight of a bird, and the Path of Devotion to a Coach dragged by horses, and to continue that way of looking at it, we must compare the Path of Action to the Path followed by a patient pedestrian. This sounds as a very slow method of ascending to the summit. But I have tried to show that the Path Action is strewn with flopping birds, which are unable to take to their wings to any distance, and that our powerful horses so often run away with the Coach, into tempting green valleys. If you agree with me you will see that a Pedestrian who takes in hand is heaviest body first, minds every step, chooses now a steep footpath, now an easy level track, is more likely to reach the summit. like the tortoise, slow but sure Of course as in the other Paths he must first have the Desire to go up, and must know how to choose between two tracks—the Bhakti and Dnyana aspects must be wedded to the Karma, only they take a second and third place.

362. The welfare of the world—The goal:—We have tried to see from every point of view how

the whole Creation is inseparably bound together. and that All Life is one. That is at least our Hypothesis; and so all notions of reaching the Summit slowly or quickly, involve Personal advancement in Time, which we shall deal with later. If we are trying to go faster so that we may be in a better position to help others, that is quite legitimate, but different; but if that is the real aim. why not begin helping others here and now? If I look round to my neighbours. I can easily see that if I am a frail weak man, there are so many who are weaker still. If I am poor, there are plenty of people poorer still. If I am better placed than others, I can voluntarily give up something of my ease and comfort, and engage in some activity which will help my fellow beings. If my hands are dirty I can sit down with a lot of soap and water and clean them thoroughly; or I can clean the dirty noses of children with the same soap and water with the same result. So many people quote the Bhagvadgita as the "Gospel of Action" often ignore the qualifying clauses:

"Having eye to the welfare of the world, thou should perform action. (III. 20). As the ignorant act from attachment to action, should the wise man act without attachment, desiring the welfare of the world (III. 25). Lokasangraha—the welfare of the world is the KEY to all right action, and every step taken in that direction, can not but take us one

step towards the Goal, which we have seen is "SEE-ING THE ONE IN THE MANY." Mere feverish activity so common in the world is not ACTION. Even in asking Arjuna to fight the Gita using the very word "fever" says: "Surrendering all actions to me, with thy thoughts resting on the Supreme Self, from hope and egoism freed, and of mental fever cured, engage in battle. (III 30)". Getting rid of the mental fever means control of emotions, (the Bhakti aspect), and before we can conceive of the Supreme Self, we must cultivate a Rationalism beyond mere sensuous experiences, (the Dnyana aspect) and so again we see that the Trinity—comes in. Only we begin the Karma—Action not activity.

363. The Law of Karma and Reincarnation:

Before a man can reconcile himself to talking slowly, he must feel convinced that we all live in perfectly ordered Universe, where Newton's Laws hold good, in the Physical and the Super-physical worlds taken together as a whole. We have already seen that all "In determinism and probability" has come into modern science only because they refuse to take into account the portion of the Iceberg under the water. Nothing can happen to any man or woman unless he has deserved it. A Man reaps as he sows. This is not a blind belief in Fate or Prarabdha—which is no more than action begun by ourselves, to which are to be added efforts being

made now. Of course this involve a previous life which determines the surroundings in which we are born and our capacities, but it also includes our conduct in this life as well. Suppose a man has neglected mathematics till he is twenty years old, that would be part of his Prarabdha up to that moment; and perhaps no amount of hard work would enable him to take the Cambridge tripos in that subject. That is only natural. Every force is a vector, and acts on its own level and in a particular direction. If the present resultant is acting in a direction contrary to what we desire, we can set going other suitable forces, and we are sure to reach our goal in time: and the time will obviously depend upon the relative values of the vectors. This is often described as the Law of Karma, and as we are taking the invisible worlds as well, it involves Reincarnation also and there is nothing unscientific about it. One corollary of this conviction is that we will cease to grumble about this or that. There is no doubt that our environment has a great influence on the result of our efforts, but that is part of our own Karma, and we shall be content to take things exactly as they come, as does a man who has to drive a motor car in a crowded street where people often dart across unexpectedly. Only one who can steer his car properly in that traffic as it can safely reach his destination

- 364. Better activity of some kind than no activity at all.
 - 365. This world or the next.
- 366. The race between new desires and creation of the objects for their gratification.
 - 367. This race must stop somewhere.
- 368. So he leaves off the results and takes things as they come.
- 369. He is as happy in hovel as he is in palace, neither attracts him nor repells him.
- 370. Then a glimps of the supreme is gained.

XXXV—Time and the Timeless.

371. The Universe a problem in Dynamics, not Statics. In all religions All-Highest has been described as the timeless, as One beyond Time and Space, a state of things which is difficult to conceive of; and yet, they all assert that it is so, and that it is possible for man to realise that state. Let us consider thus fascinating problem once again from quite a different angle.

The old philosophers have described this world as Kshanika: and this has often been interpreted tolmean that it is evanescent, that it is like a huge bubble that may burst any moment. Our hills and valleys appear so solid to us that it is difficult to agree to this view. But even modern science tells us that in spite of the apparently rigid structure, the molecules which compose the rocks never touch each other, and that they are not stationary, but in constant motion. With our growing knowledge o the internal arrangement of atoms and the discovery of the osmic rays, which can easily knock off electrons with such ease, it is now possible to imagine our solid rocks being replaced particle by particle in time. In the case of the vegetable and animal kingdoms, we can see this exchange taking place before our very eyes. The hundred and fifty pounds of matter which compose my physical body are not my private property, but

have been lent to me out of the common stock of matter, which is in constant circulation. As the earth rotates on its axis the heat received from the Sun sets up currents, which churn up this gaseous envelope; and as it sweeps across empty space in revolving round the Sun, it perhaps gathers cosmic dust and leaves behind it some of its contents to be picked up by other planets. Our Solar system itself is not standing still, but evidently travels through the starry heavens at a speed of which we have no idea. The whole Universe is thus in a constant state of flux, and changes its form from moment to moment. It is Kshanika. It is problem in Dynamics and not Statics.

Every movement is a change of position and this implies the idea of Space, and as this change in position may be slow or fast, it involves a notion of time as well. The rate of change or the velocity can be measured only in terms of distance in space per time. Space and Time thus go together, as far as the form-side of matter is concerned. From the point of view of the observer however, every movement is from one position to another position, and To him appears to him as a sequence of events. the first seems to be the Cause, the second the Effect. As the movement proceeds and a third event takes place the second becomes the Cause in its turn and so on. Each event becomes a link in a Chain of Causation and this appears to be inseparable from Time and Space. All the three go together. Is it posible to experience one of these without the other?

372. Chronological Time:—If there existed an observer capable of understanding movement in space, before our Solar system was born, he would have found it impossible to take any measurements when it was in a nebular state. It is only after the separation of planets that he could have noticed a certain tendency for events to repeat themselves after similar intervals, long or short. He would observe cycles, and perhaps see how small cycles fitted into larger ones, and so on. Accurate measurements would be possible only after things had settled down to a fairly regular sequence. We have now reached this stage and we take the time taken by the earth to go round its axis, or what comes to the same thing, the time taken by a Star (Siderial time) or the Sun (Mean Solar time) from zenith back to zenith again, and base our unit of time on this. We designate this Chronological time. If the earth slows down this unit may change, but as long as the eatth exists and continues to rotate, this C. T. will exist and serve as a unit of measurement in all cases where we are concerned with mechanical phenomena. Even vital phenomena which take time for its results to be perceived in the physical world will continue to do so. A seed will take time to grow into a plant, which will give

flowers, fruits and seed again. The physical body of a child will take years to grow to manhood and to old age. The evolution of the physical body through the agency of variation and natural selection will take long periods of Chronological time as before, although by the application of other Laws of nature the process may be quickened. But the clocks of mankind will run as long as the physical world lasts, and there is one intelligent human being to make use of them. As far as the form-side of nature is concerned it would be foolish to deny the existence of Chronological time. How then can we conceive of the Timeless?

373. Psychological time:—Let us try to look at the various events from the point of view of Con-We know that a man gets his sensesciousness. impressions through his five Dnyanendriyas—sense organs more or less accurately. These impressions are combined with the contents of his memory (i.e. previously recorded sense-impressions), reviewed by his intellect, (which is his knowledge of the Laws of nature). And then the Inner man who somehow seems to have his own peculiar angle of vision apart from both, decides what he will do, and sends out his response through his five Karmendrinas organs of action. That is the mechanism of Consciousness. Some impressions give us pleasure others pain. As the Bhagvadgita puts it, both are "contact-born" i, e, depend both on the object and

the Subject, and have a beginning and an end in time. And yet if we ponder over it a bit we shall see that this is not quite the clock-time. When we are in a happy mood in the midst of our near and dear ones, time flies so fast; that hours are felt as: minutes. On the other hand, when we are in pain with a splitting headache, or suffer from insomnia, the hands of a clock move so slowly that we begin, to wonder if it has been wound. When we are walking the first mile appears normal, but as we are tired we begin to suspect that the engineer has perhaps made a mistake in putting in the sixteenth or twentyfourth mile-stone. From a Psychological point of view both time and distance are felt as quite different from what they are; and herein lies the possibility of approaching the problem of the Timeless.

Einstein has shown us how the Velocity of light enters every measurement in space, even in the case of a stationary observer. The time-interval between two events can be recorded on a machine and one of these instruments is placed about midway between a gun and a target (after making due allowance for the speed of the projectile) the firing of the gun and the striking of the target will be recorded as simultaneous events, as far as our clocks can show. If in some manner we can reproduce similar conditions in the psychological perception of events, all these would appear to us as simultane-

ous, and time would cease to intrude on our consciousness. Let us see if this can be done.

374. Without condemnation or Justification: - Most of us who are average men have our own point of view. Each one of us is the centre of his own universe. We are Ego-centric, and so is everyone else. As soon as the sense-impressions come into our psyche the mental process begins. The layers of our memory, with which previous similar sensations are associated, are disturbed; and often the memory is so strong that it may be stirred up even without any outside stimulus. If a man with a "Turkish fez or a Gandhi cap" approaches, we hardly ever look at him as a man. The retinal impression by the time it reaches the brain is already coloured with the words "Muslim or Congress," with all our prejudices or prepossessions which further lead us to condemn or to justify. Chronologically speaking it is impossible for us to erase the tablets of our memory, and in our search for the Timeless the first step is to train ourselves to experience every sensation, without condemnation or justification. This means that we have to learn to short-circuit our emotions, and even our analytical faculty which constitute our personality. The old way of putting it was that we must be Dwandwatita -above both pleasure and pain. But as this has often been misunderstood, "experiencing without condemnation or justification" seems a better way of

stating it. This is possible only when we think and feel exactly as the other person does. We fully understand him and naturally sympathise with him knowing full well that he is, but the last link in his Iron Chain of Causation exactly as we are in ours. We shall of course continue to look at events from our own point of view: but we must learn to make that man or heast the centre of our consciousness as well a process of vicarious at-one-ment, if we may use the word in that manner. This is certainly not a very easy task; but if I can master this technique of splitting up the centre of my circle into the two Foci of an Ellipse-"you and I," it will be equivalent to being present both at the firing point and the target at the same moment. Psychological time will cease to exist for me, just as Chronological time could not be detected by Einstein's recording instruments. I shall get not a personal and partial view of things, but a Universal and Total vision. I shall be living in the Timeless. I shall have experienced Reality, which is Fluidic, Dynamic, and ever changing from moment to moment. I shall have attained Perfection, Self-realisation, Salvation, Liberation or Mokshs.

375. Flower of Humanity—not ossified mummies. It is interesting to note that a person's ability to master this technique does not seem to depend upon the stage he or she may have reached in the evolutionary process, or else it would be

difficult to understand the claim made of old. that any man or woman, by following this path can attain to Mokshs. If it is only a question of balancing the impacts on our consciousness from within and without, it would be possible to achieve this end by a process of suppression and hardening, so that we make ourselves too dull to appreciate either the sorrows or joys, of both ourselves or others. Persons who start at the wrong end, and seek Moksha for themselves, to be rid of Sansara, the round of birth and deaths, might achieve this balance and gain some respite for themselves for a time; but such Muktas would be like "ossified mummies" who take no interest in the sorrows or joys of mankind. It is difficult to imagine that such is a goal of this laborious process of Evolution. On the contrary, we are assured that the Jeevanmuktas, the Flower of Humanity. Who see the One in the many and many in One, are supremely sensitive to the faintest cry of pain. They are fully aware of the existence of human sorrow, the Cause of the sorrow, and the Way out of it: and They are constantly proclaiming these Truths to humanity in diverse ways.

376. The Means are the End:—Thus in our approach to the problem of the Timeless, first of all we have to understand that the goal of the humanity is not static but intensely Dynamic, and that is not to be reached by any mental process, which can

work only in time. A learned man feels so sure of his position that it is very difficult for him to see the other man's point of view; and in as much as most of us use our learning to justify ourselves and to condemn others, it only helps to turn an ignorant man into a "learned fool" as Samartha Ramdas puts it. Even a reversal of this process, where we condemn ourselves and justify others takes us in the wrong direction. Even a slight success in the cultivation of good habits or virtues in ourselves is apt to rouse in us a feeling of self-righteousness, which is as undesirable as self-condemnation, and both do harm. Both the ignorant, and the learned, vicious and the virtuous, the wicked and the good are all integral parts of the Timeless Reality, we have tolearn to look not only at others but even at ourselves without condemnation or justification, and try to understand why it is so. Instead of suppresing what we think is undesiable in us or in others. or trying to find an escape from it we must face it, and then we shall discover that the real problem is quite different from what we took it to be. Every problem can thus be traced to our being self-centered, and we have seen that we can never reach the Timeless until we break up the centre of our circle into two foci. Self-centeredness leads to self-gratification, and we need possessions for the purpose. As it is hard to distinguish need from greed, and once we start on this slippery path, greed leads to cruelty. individual and national under one name or another.

and the concomittant misery in the world for which we are all groping for a solution—a solution which can be discovered only by one who has a total view of things, one who lives in the Times. For this purpose we have seen that we have to cultivate a habit of looking at everything and everyone including ourselves without condennation or justification. We must let go our hold on Psychological time, which we catch that way with our mind. The Means we adopt become the End. That is the Path.

One who is thus established in this attitude of Love will not wait for the world to change, but begin wherever he happens to be. Thus living in the Timeless he will cease to add any more links to his Chain of Causation, but he will have to break his chain link by link as he forged it himself, and Chronological time will continue to operate even in his case. All the learning which he had acquired and the virtues he had cultivated, and which he had deliberately bypassed for a time, will now come in very useful in guiding his Karmendriyas, and in fact they will determine his place amongst the Helpers of the world in accordance with God's Plan-which is Evolution. In this God's Plan the meanest of us is bound to reach this state one day. All we can do is to delay the day and undergo unnecessary suffering. But the first step is to understand the problem and to feel that such things can be.

12/09